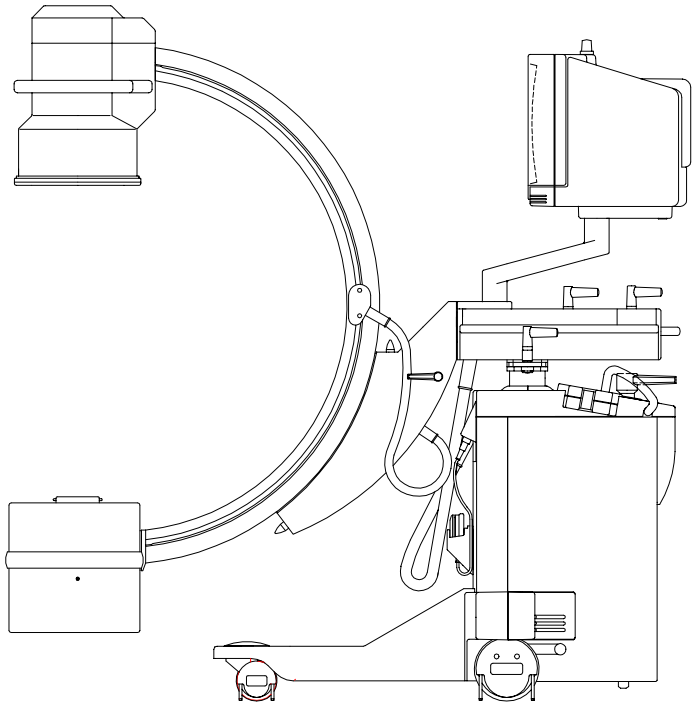
Technical - Documentation

7700

Compact



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REVISION 3.0b
18. Jan 2001
00-441017-03

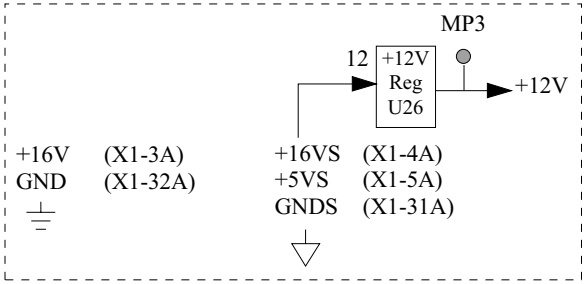
OEC MEDICAL SYSTEMS, GMBH

FUSE LIST for 7700

Fuse	Rating	Model	Location	Funktion	Functional Schematic Diagram
F1	15A 20A	200-240V 100-130V	Power Plate Assembly	AC IN	Power On
F2	15A 20A	200-240V 100-130V	Power Plate Assembly	AC IN	Power On
F3	2A		Power Plate Assembly	AC IN	Power On
F4	10A		Power Plate Assembly	24VAC	Power On / Carm Lift / kV Generation & Regulation / mA Generation & Regulation / Interconnect Schematic
F5	1.6A		Power Plate Assembly	220VAC	Monitor Rotation / Interconnect Schematic
F1	500mA		B206-8	AC IN	B206 schematic / Fluoro Mode Control Logic / Film Mode Control Logic / Image System
F1	50mA		B111	AC IN	Power On
F2	50mA		B111	AC IN	Power On
F1	50mA	Compact	B111MR	AC IN	Monitor Rotation
F2	50 mA	Compact	B111MR	AC IN	Monitor Rotation
F1	100mA	Series	B116	AC IN	Power On
F2	315mA	Series	B116	5VDC	B104
F3	315mA	Series	B116	5VDC	B104
F4	315mA	Series	B116	24VAC	Monitor Rotation
F5	315mA	Series	B116	5VDC	B104
F1	2A		NG1 (B420) NG2 B430)	AC IN	Power On
F2	2A		NG1 (B420) NG2 B430)	AC IN	Power On
F1	2.5A		B143	24VDC	mA Generation & Regulation
F1	2.5A		Monitor BG 641	220VAC	Power On
F2	2.5A		Monitor BG 641	220VAC	Power On
F608	1.25A		Monitor WMN		
F	2,5 A		Monitor WM 3819	220VAC	Power On
F	4A	Series	Image Processor	220VAC	Power On
F	4A	Series	Image Processor	220VAC	Power On
F	500mA	Series	Monitor HCC	220VAC	Power On
F	500mA	Series	Monitor HCC	220VAC	Power On
F1	1.6A	Series	B117 HCC2	9VAC	Power Supply for B108
F2	500mA	Series	B117 HCC2	9VAC	Power Supply for B108
F3	100mA	Series	B117 HCC2	220VAC	Power Supply for B108
F4	100mA	Series	B117 HCC1 & HCC2	220VAC	Power Supply for B108
F5	800mA	Series	B117 HCC1 & HCC2	9VAC	Power Supply for B108

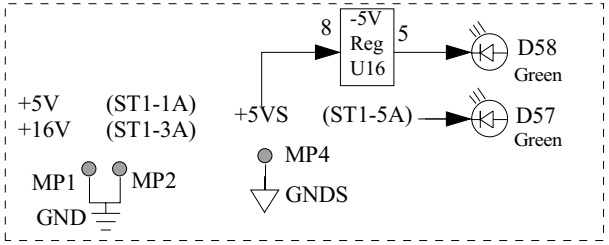
B64 BOARD

1. kV Control Logic
2. kV Display Control



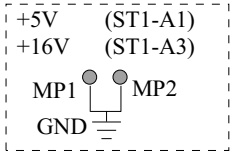
B300 BOARD

1. Control Panel Interface
2. kV Control Logic
3. mA Control Logic
4. II Mag Mode Control
5. Fluoro & Film Mode Control Logic
6. Hand and Footswitch Monitoring



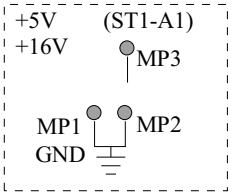
B101 BOARD

1. Iris Control
2. Fluoro Exposure Time Control
3. Fluoro Beep Control



B102 BOARD

1. Film Exposure Time Control



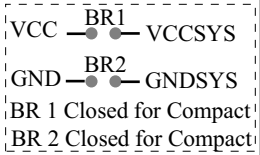
B304 BOARD

1. Image Processor Interface
2. Fluoro Mode Control Logic
3. Monitor Xray Lamp Control
4. Monitor "Home Positioning"

VCCSYS = 5V ST5-1 / ST9-1A/C
GNDSYS = ST1-1/2 / ST9-32A/C MP1

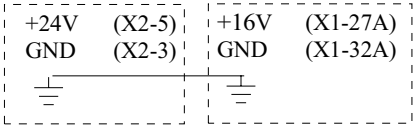
VCC = 5V ST5-3
GND = ST5-4 MP2

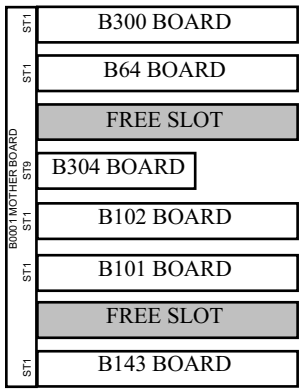
VCCVBS = 5V ST3-17
GNDVBS = ST3-25 MP3



B143 BOARD

1. mA Control Logic





OEC MEDICAL SYSTEMS, GMBH

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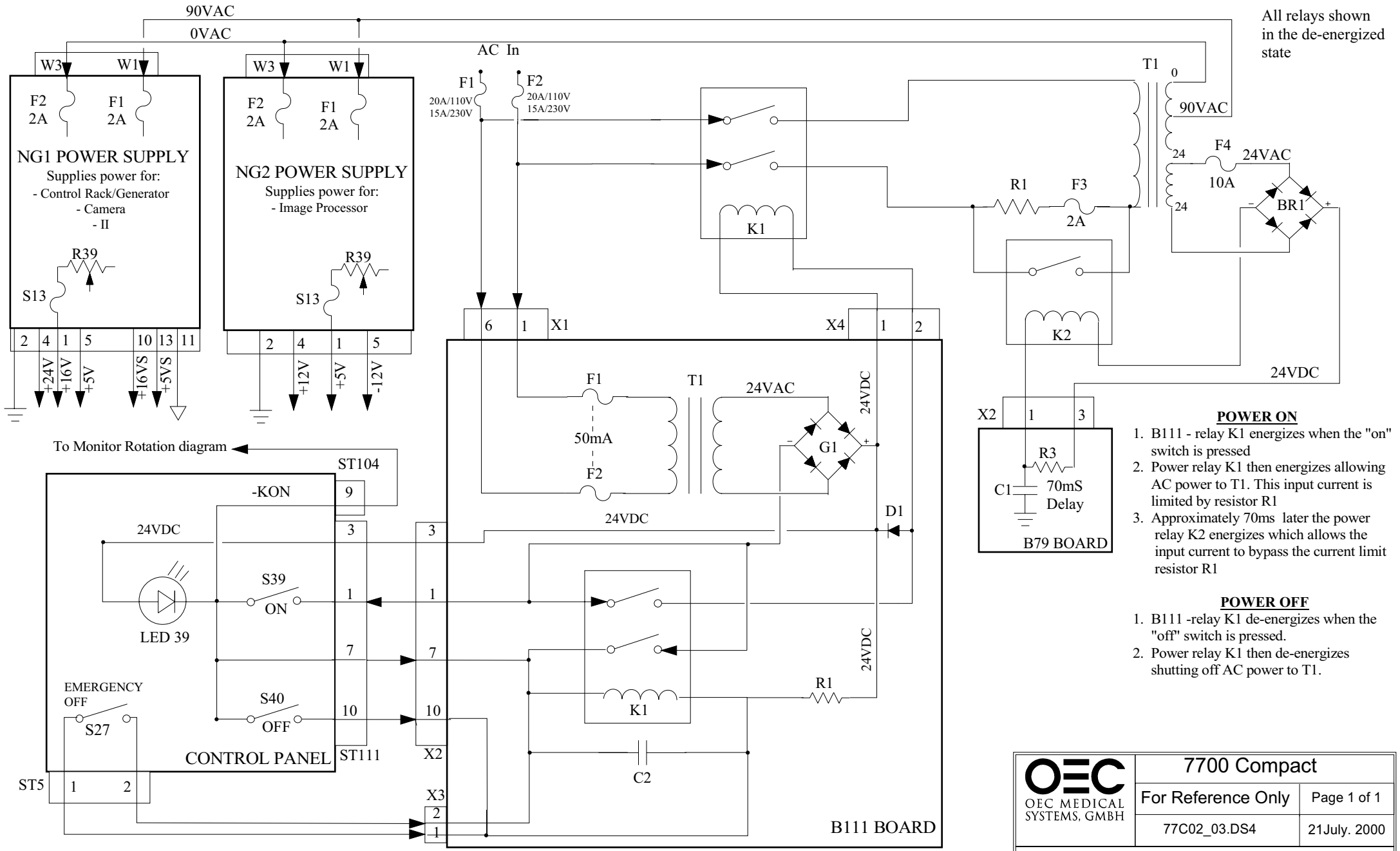
CONTROL RACK BOARDS

POWER & FUNCTIONAL DESCRIPTION



POWER ON

1. B111 - relay K1 energizes when the "on" switch is pressed
2. Power relay K1 then energizes allowing AC power to T1. This input current is limited by resistor R1
3. Approximately 70ms later the power relay K2 energizes which allows the input current to bypass the current limit resistor R1

POWER OFF

1. B111 -relay K1 de-energizes when the "off" switch is pressed.
2. Power relay K1 then de-energizes shutting off AC power to T1.

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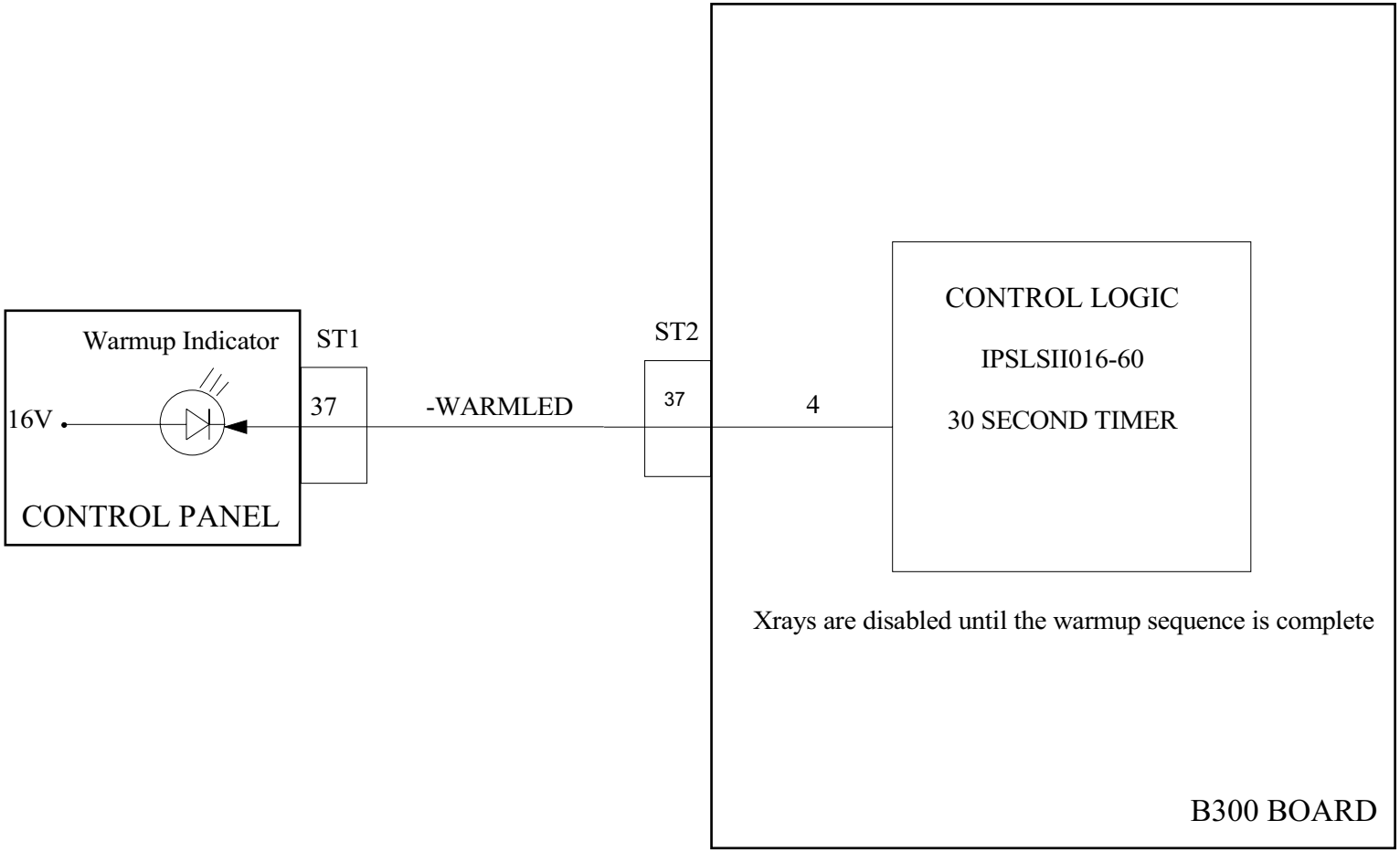
POWER ON		



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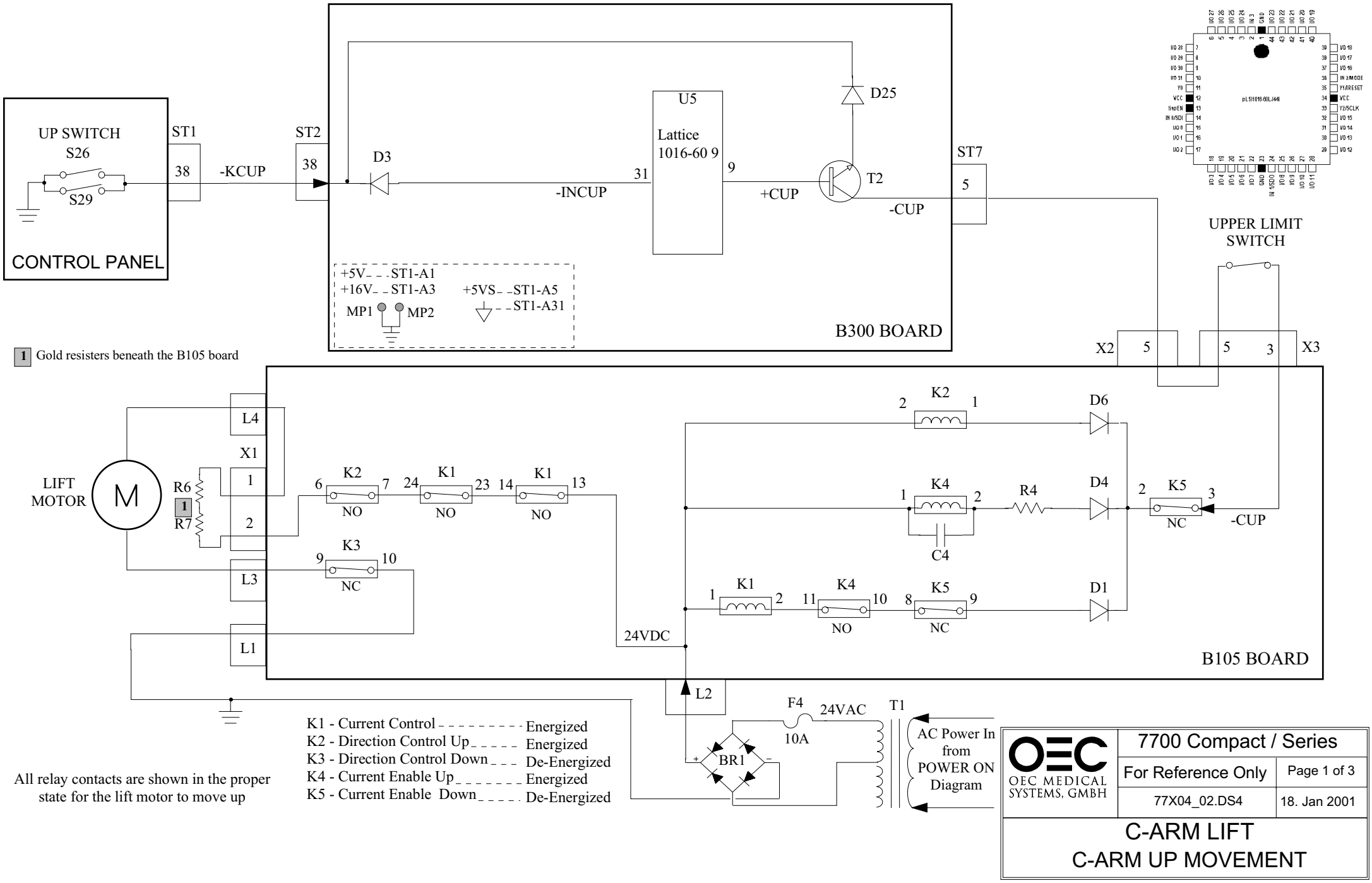
	77X03_02.DS4	21. July 2000

SYSTEM WARMUP



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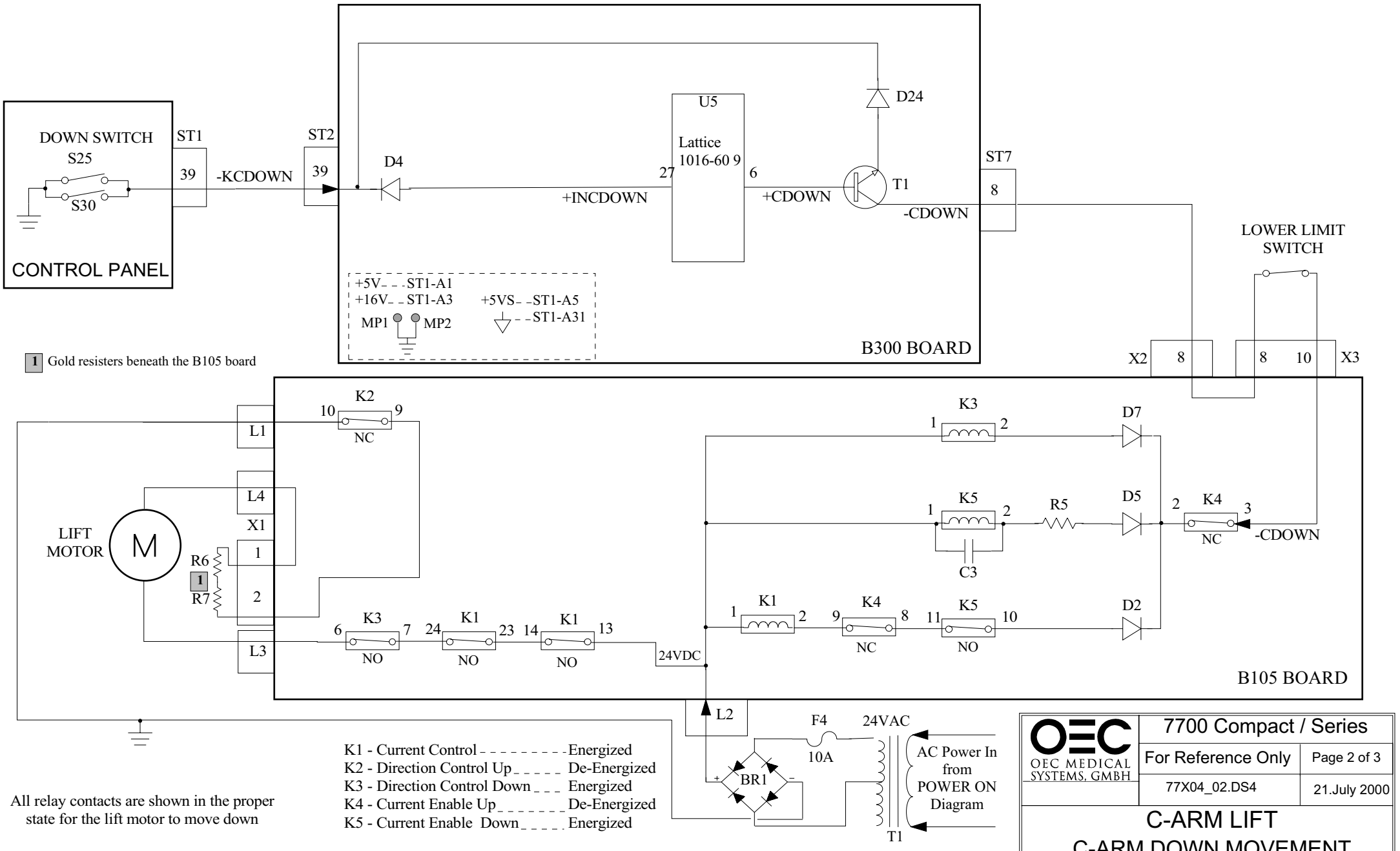
C-ARM LIFT
C-ARM UP MOVEMENT


DOWN SWITCH
S25
S30
CONTROL PANEL
ST1
39
-KCDOWN
ST2
39
D4
+INCDOWN
U5
Lattice
1016-60
27
9
6
+CDOWN
D24
T1
-CDOWN
ST7
8
+5V ST1-A1
+16V ST1-A3
MP1
MP2
+5VS ST1-A5
ST1-A31
B300 BOARD
LOWER LIMIT
SWITCH
X2
8
8
10
X3
1 Gold resisters beneath the B105 board
K2
10
9
NC
L1
L4
X1
1
2
L3
LIFT
MOTOR
M
R6
1
R7
K3
6
7
NO
K1
24
23
NO
K1
14
13
NO
24VDC
K3
1
2
D7
K5
1
2
R5
D5
2
K4
3
NC
-CDOWN
C3
K1
1
2
K4
9
8
NC
K5
11
10
NO
D2
B105 BOARD
L2
F4
10A
24VAC
BR1
T1
AC Power In
from
POWER ON
Diagram
K1 - Current Control - - - - - - - - Energized
K2 - Direction Control Up - - - - - De-Energized
K3 - Direction Control Down - - - Energized
K4 - Current Enable Up - - - - - - De-Energized
K5 - Current Enable Down - - - - Energized
All relay contacts are shown in the proper
state for the lift motor to move down
OEC
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SYSTEMS, GMBH
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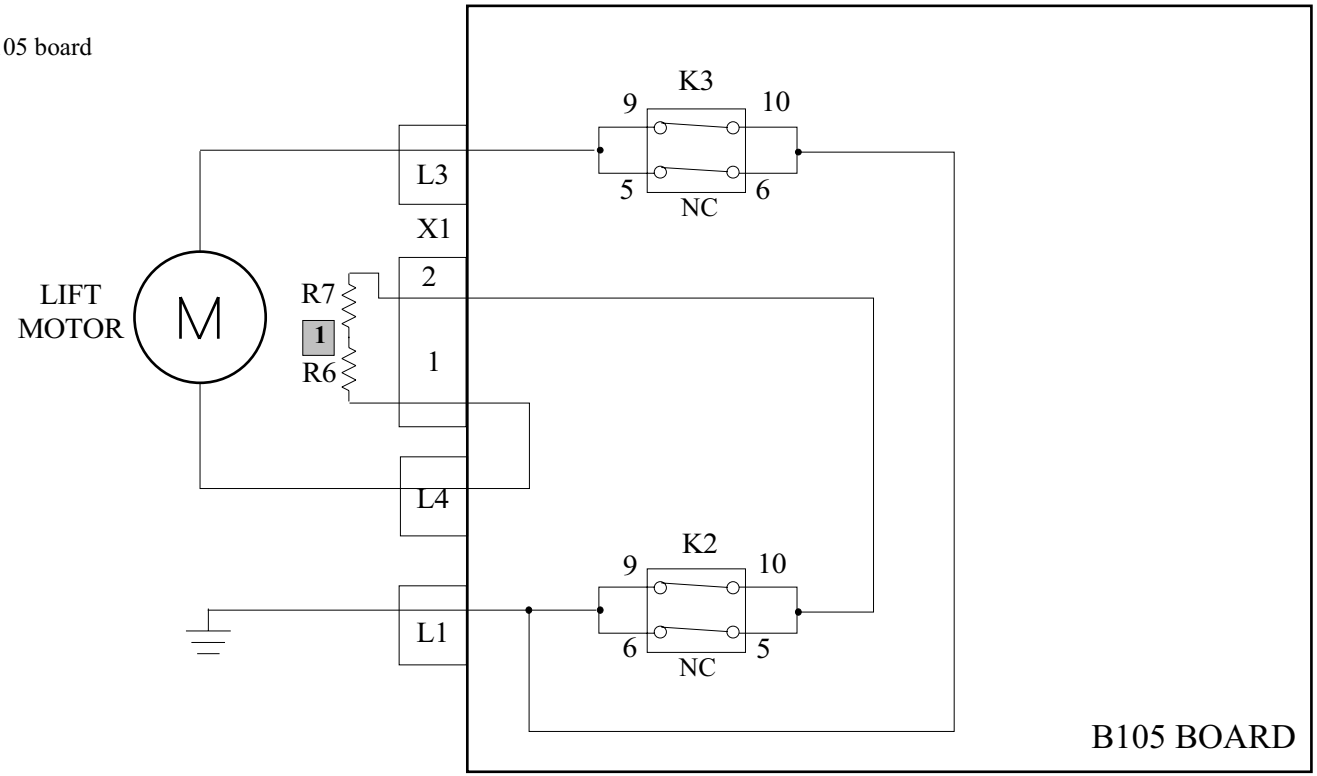
C-ARM LIFT
C-ARM DOWN MOVEMENT

All relay contacts are shown in the proper state for no lift motor movement

1 Gold resisters beneath the B105 board



K1 - Current Control ---------- De-Energized
K2 - Direction Control Up ------ De-Energized
K3 - Direction Control Down ---- De-Energized
K4 - Current Enable Up -------- De-Energized
K5 - Current Enable Down ------ De-Energized

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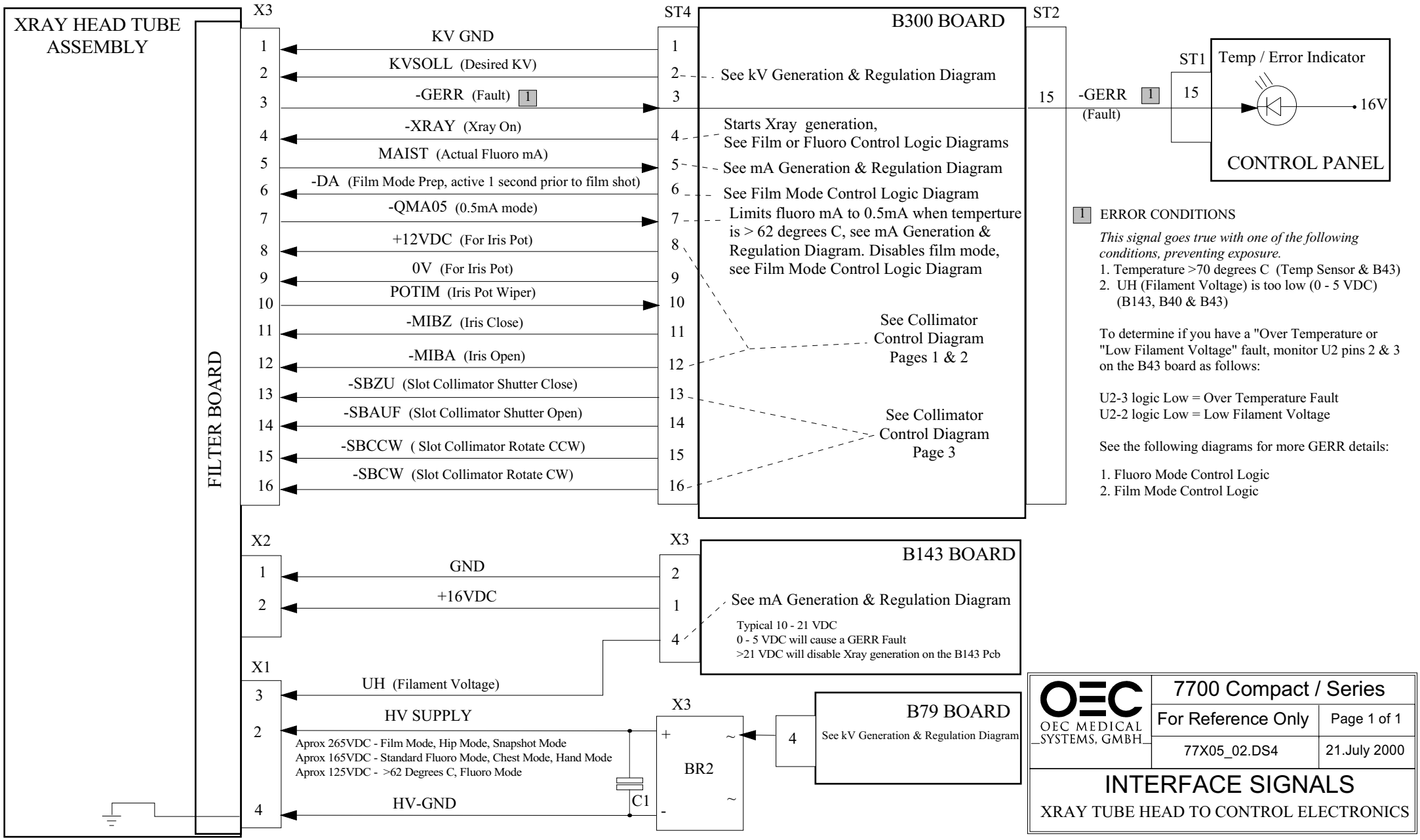
C-ARM LIFT NO LIFT MOVEMENT		


XRAY HEAD TUBE ASSEMBLY
FILTER BOARD
X3
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
KV GND
KVSOLL (Desired KV)
-GERR (Fault) 1
-XRAY (Xray On)
MAIST (Actual Fluoro mA)
-DA (Film Mode Prep, active 1 second prior to film shot)
-QMA05 (0.5mA mode)
+12VDC (For Iris Pot)
0V (For Iris Pot)
POTIM (Iris Pot Wiper)
-MIBZ (Iris Close)
-MIBA (Iris Open)
-SBZU (Slot Collimator Shutter Close)
-SBAUF (Slot Collimator Shutter Open)
-SBCCW (Slot Collimator Rotate CCW)
-SBCW (Slot Collimator Rotate CW)
ST4
B300 BOARD
See kV Generation & Regulation Diagram
Starts Xray generation,
See Film or Fluoro Control Logic Diagrams
See mA Generation & Regulation Diagram
See Film Mode Control Logic Diagram
Limits fluoro mA to 0.5mA when temperture is > 62 degrees C, see mA Generation & Regulation Diagram. Disables film mode, see Film Mode Control Logic Diagram
See Collimator Control Diagram Pages 1 & 2
See Collimator Control Diagram Page 3
ST2
15
-GERR 1 (Fault)
ST1
15
Temp / Error Indicator
16V
CONTROL PANEL
1 ERROR CONDITIONS
This signal goes true with one of the following conditions, preventing exposure.
1. Temperature >70 degrees C (Temp Sensor & B43)
2. UH (Filament Voltage) is too low (0 - 5 VDC) (B143, B40 & B43)
To determine if you have a "Over Temperature or "Low Filament Voltage" fault, monitor U2 pins 2 & 3 on the B43 board as follows:
U2-3 logic Low = Over Temperature Fault
U2-2 logic Low = Low Filament Voltage
See the following diagrams for more GERR details:
1. Fluoro Mode Control Logic
2. Film Mode Control Logic
X2
1
2
GND
+16VDC
X3
2
1
4
B143 BOARD
See mA Generation & Regulation Diagram
Typical 10 - 21 VDC
0 - 5 VDC will cause a GERR Fault
>21 VDC will disable Xray generation on the B143 Pcb
X1
3
2
4
UH (Filament Voltage)
HV SUPPLY
Aprox 265VDC - Film Mode, Hip Mode, Snapshot Mode
Aprox 165VDC - Standard Fluoro Mode, Chest Mode, Hand Mode
Aprox 125VDC - >62 Degrees C, Fluoro Mode
HV-GND
C1
X3
+
-
~
~
BR2
4
B79 BOARD
See kV Generation & Regulation Diagram
OEC MEDICAL SYSTEMS, GMBH
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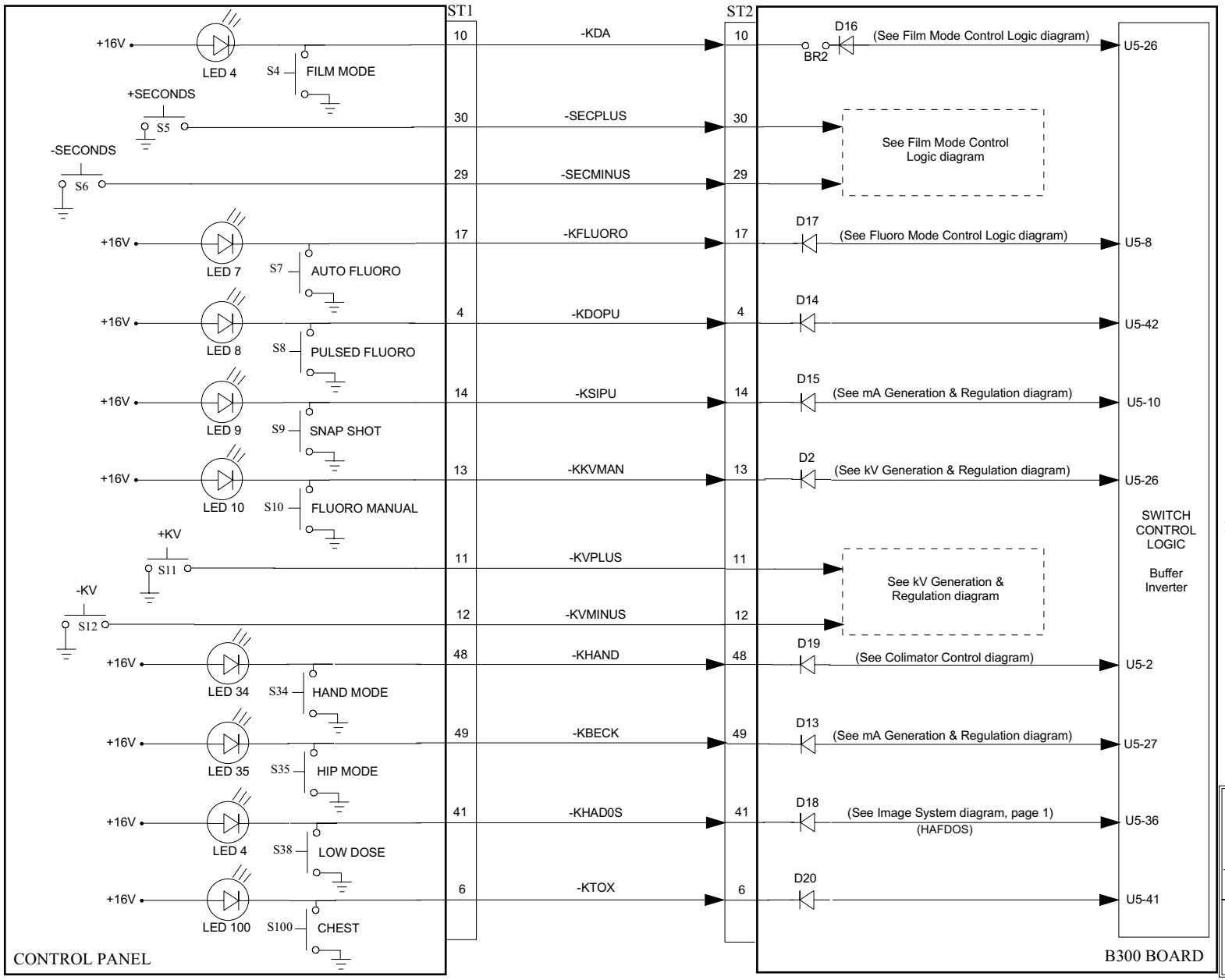
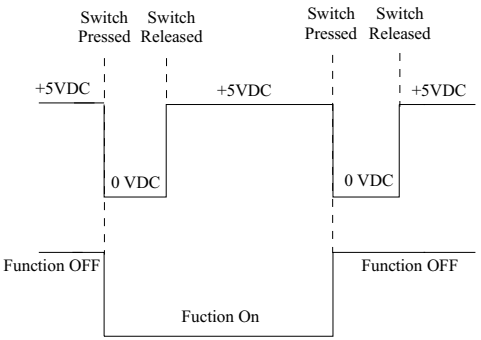
INTERFACE SIGNALS
XRAY TUBE HEAD TO CONTROL ELECTRONICS



Typical Switch Logic Control



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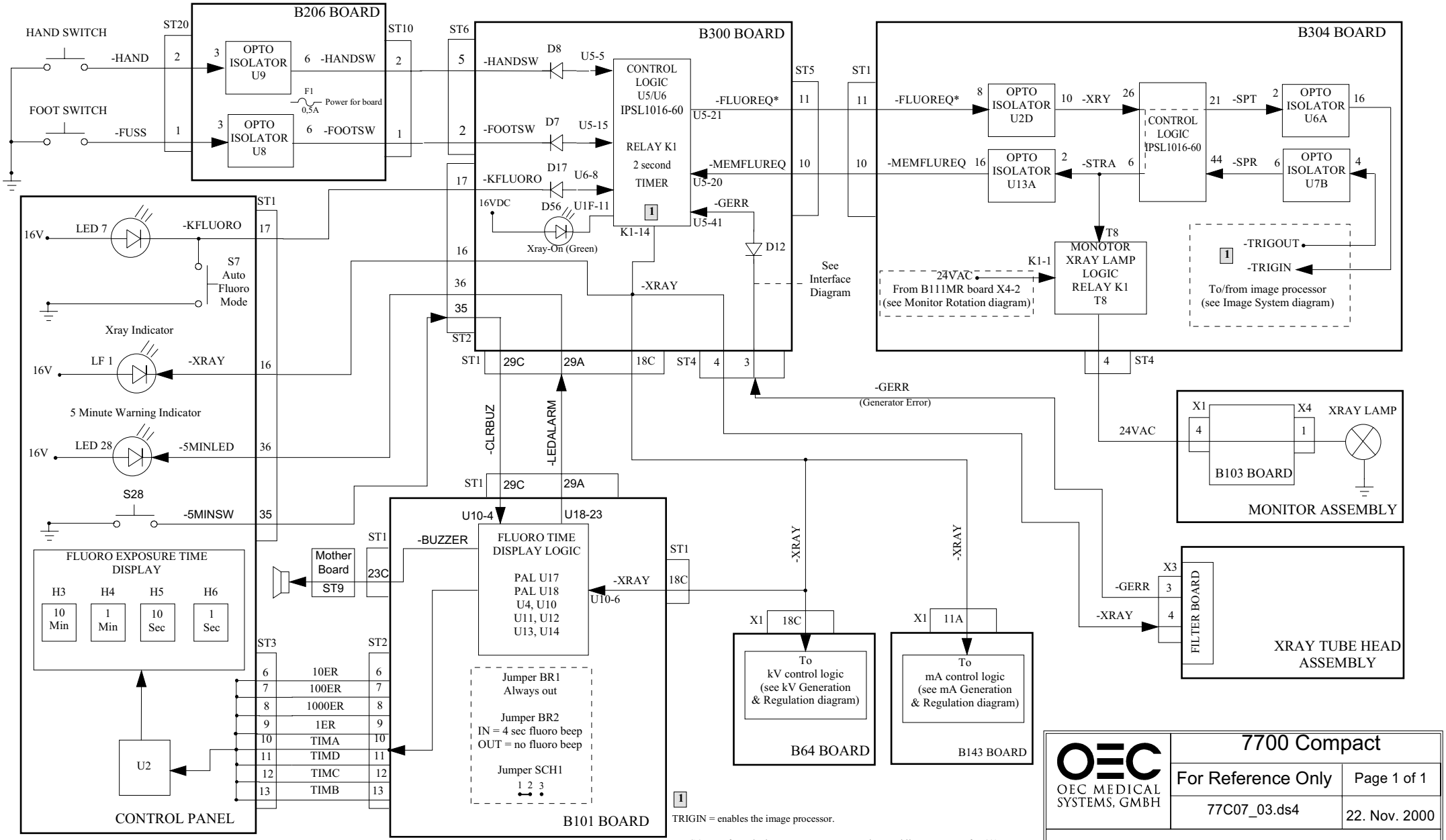
XRAY CONTROL SWITCHES



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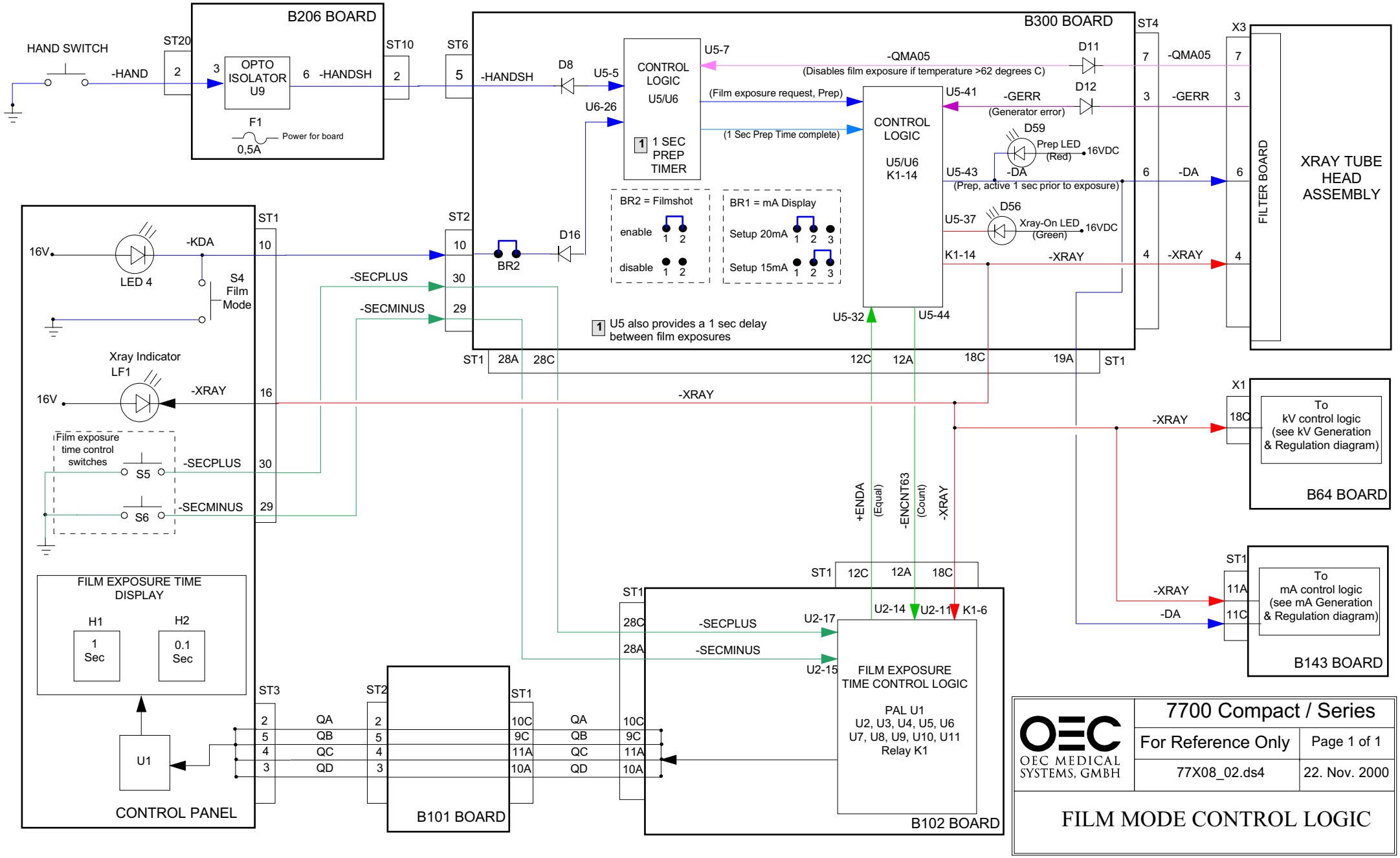
FLUORO MODE CONTROL LOGIC



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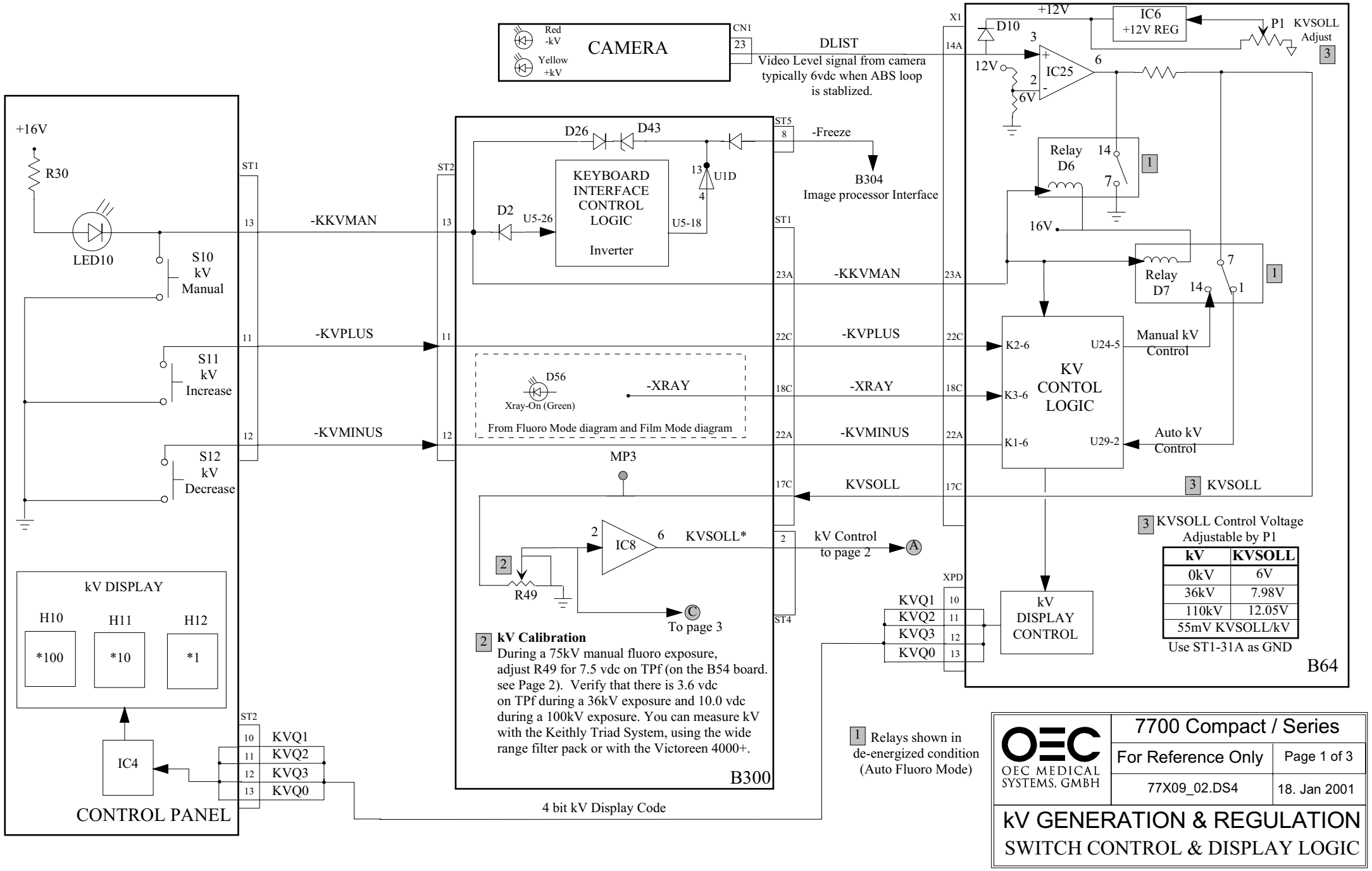
FILM MODE CONTROL LOGIC


CAMERA
Red -kV
Yellow +kV
CN1
23
DLIST
Video Level signal from camera typically 6vdc when ABS loop is stablized.
X1
14A
+12V
IC6 +12V REG
P1 KVSOLL Adjust
3
D10
IC25
12V
6V
+16V
R30
LED10
S10 kV Manual
S11 kV Increase
S12 kV Decrease
ST1
ST2
13
11
12
-KKVMAN
-KVPLUS
-KVMINUS
D26
D43
D2
U5-26
KEYBOARD INTERFACE CONTROL LOGIC
Inverter
U1D
U5-18
ST5
8
-Freeze
B304
Image processor Interface
Relay D6
Relay D7
16V
1
23A
22C
18C
22A
17C
2
4
-XRAY
D56
Xray-On (Green)
From Fluoro Mode diagram and Film Mode diagram
MP3
KVSOLL
KVSOLL*
IC8
R49
kV Control to page 2
A
C
To page 3
K2-6
K3-6
K1-6
U24-5
U29-2
KV CONTOL LOGIC
Manual kV Control
Auto kV Control
3 KVSOLL
3 KVSOLL Control Voltage Adjustable by P1
kV
KVSOLL
0kV
6V
36kV
7.98V
110kV
12.05V
55mV KVSOLL/kV
Use ST1-31A as GND
B64
XPD
KVQ1
KVQ2
KVQ3
KVQ0
10
11
12
13
kV DISPLAY CONTROL
kV DISPLAY
H10
H11
H12
*100
*10
*1
IC4
CONTROL PANEL
2 kV Calibration
During a 75kV manual fluoro exposure, adjust R49 for 7.5 vdc on TPf (on the B54 board. see Page 2). Verify that there is 3.6 vdc on TPf during a 36kV exposure and 10.0 vdc during a 100kV exposure. You can measure kV with the Keithly Triad System, using the wide range filter pack or with the Victoreen 4000+.
B300
4 bit kV Display Code
1 Relays shown in de-energized condition (Auto Fluoro Mode)
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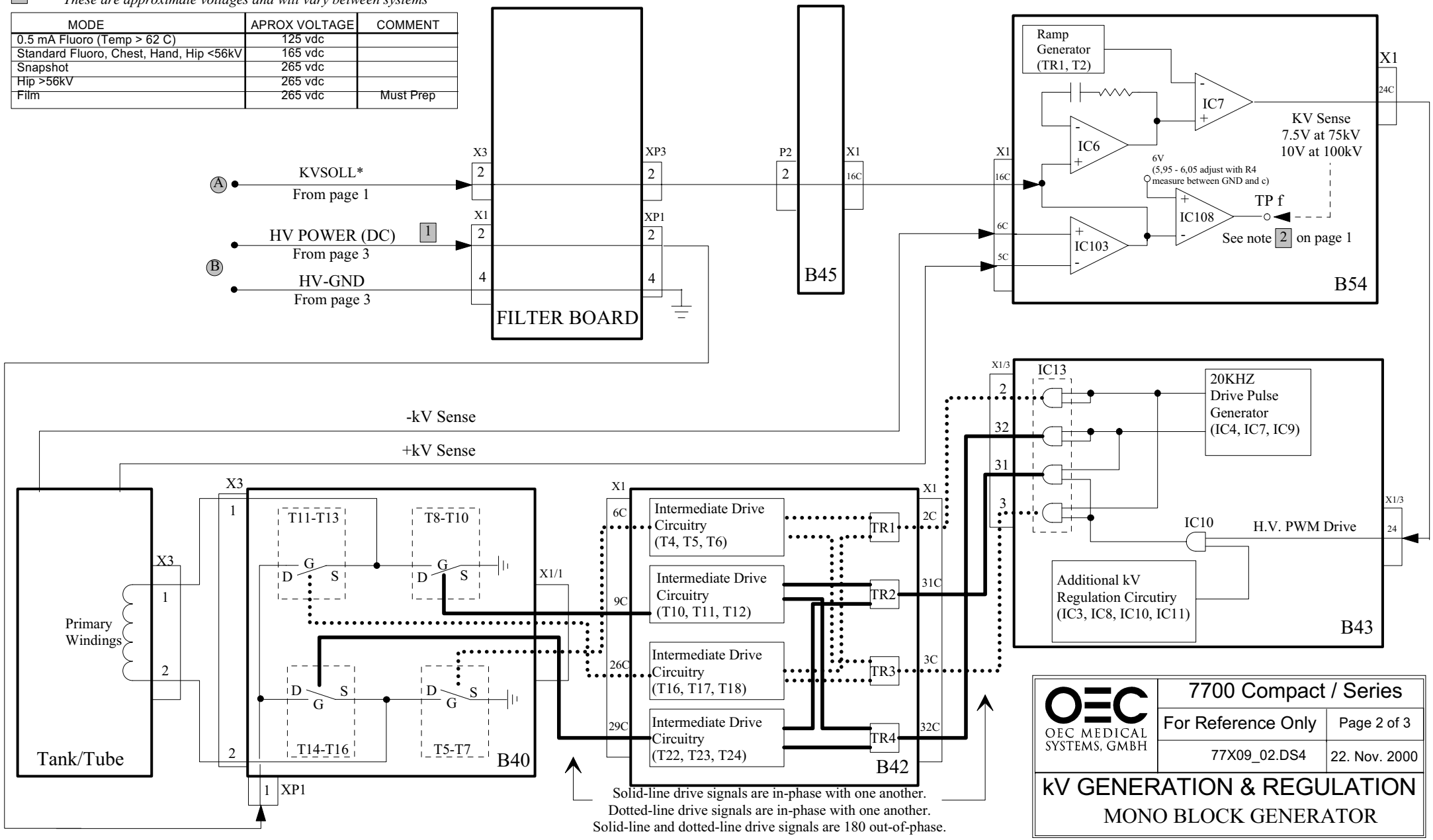
kV GENERATION & REGULATION
SWITCH CONTROL & DISPLAY LOGIC

1 *These are approximate voltages and will vary between systems*

MODE	APROX VOLTAGE	COMMENT
0.5 mA Fluoro (Temp > 62 C)	125 vdc	
Standard Fluoro, Chest, Hand, Hip <56kV	165 vdc	
Snapshot	265 vdc	
Hip >56kV	265 vdc	
Film	265 vdc	Must Prep



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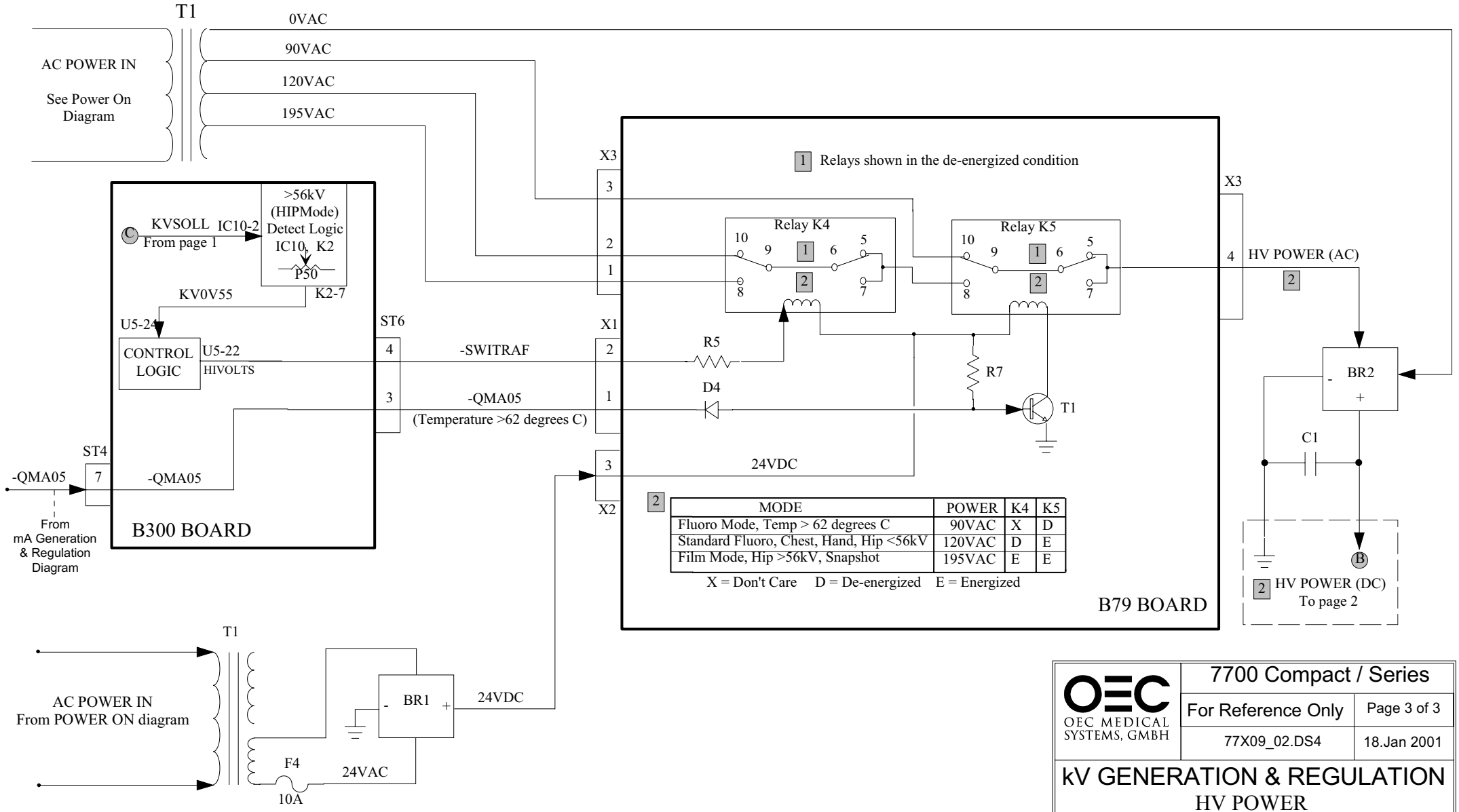
kV GENERATION & REGULATION
MONO BLOCK GENERATOR



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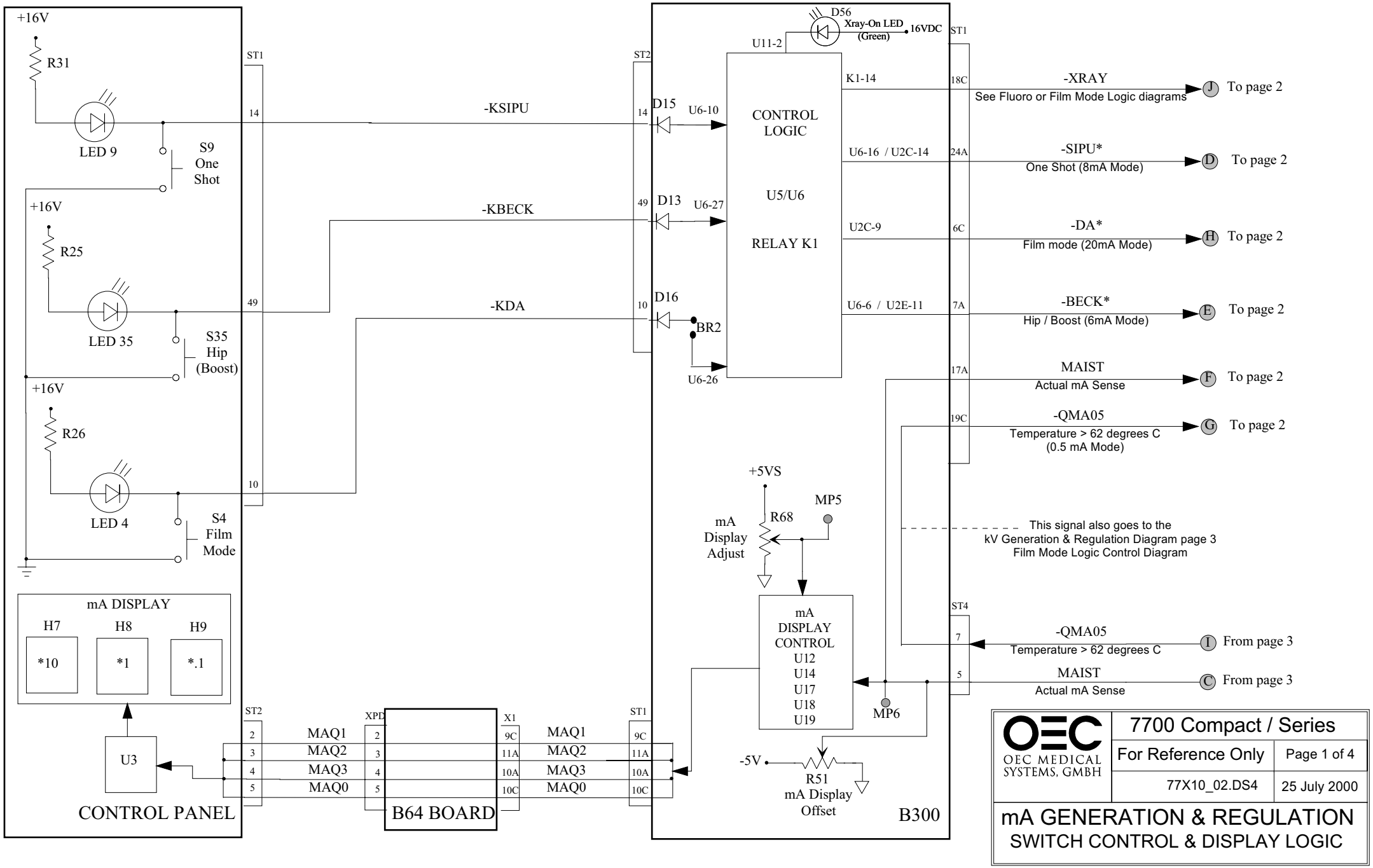
kV GENERATION & REGULATION
HV POWER



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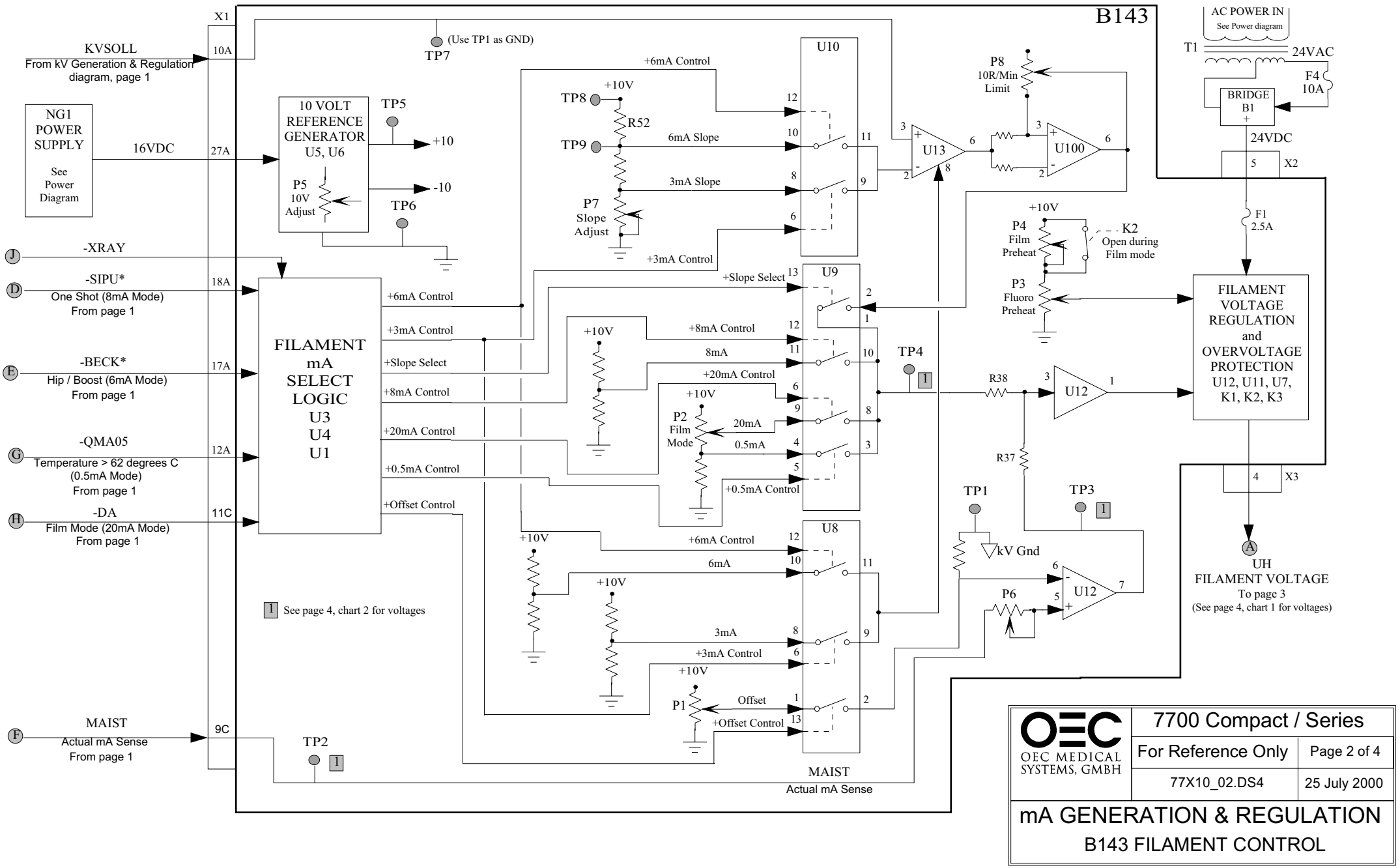
mA GENERATION & REGULATION
SWITCH CONTROL & DISPLAY LOGIC



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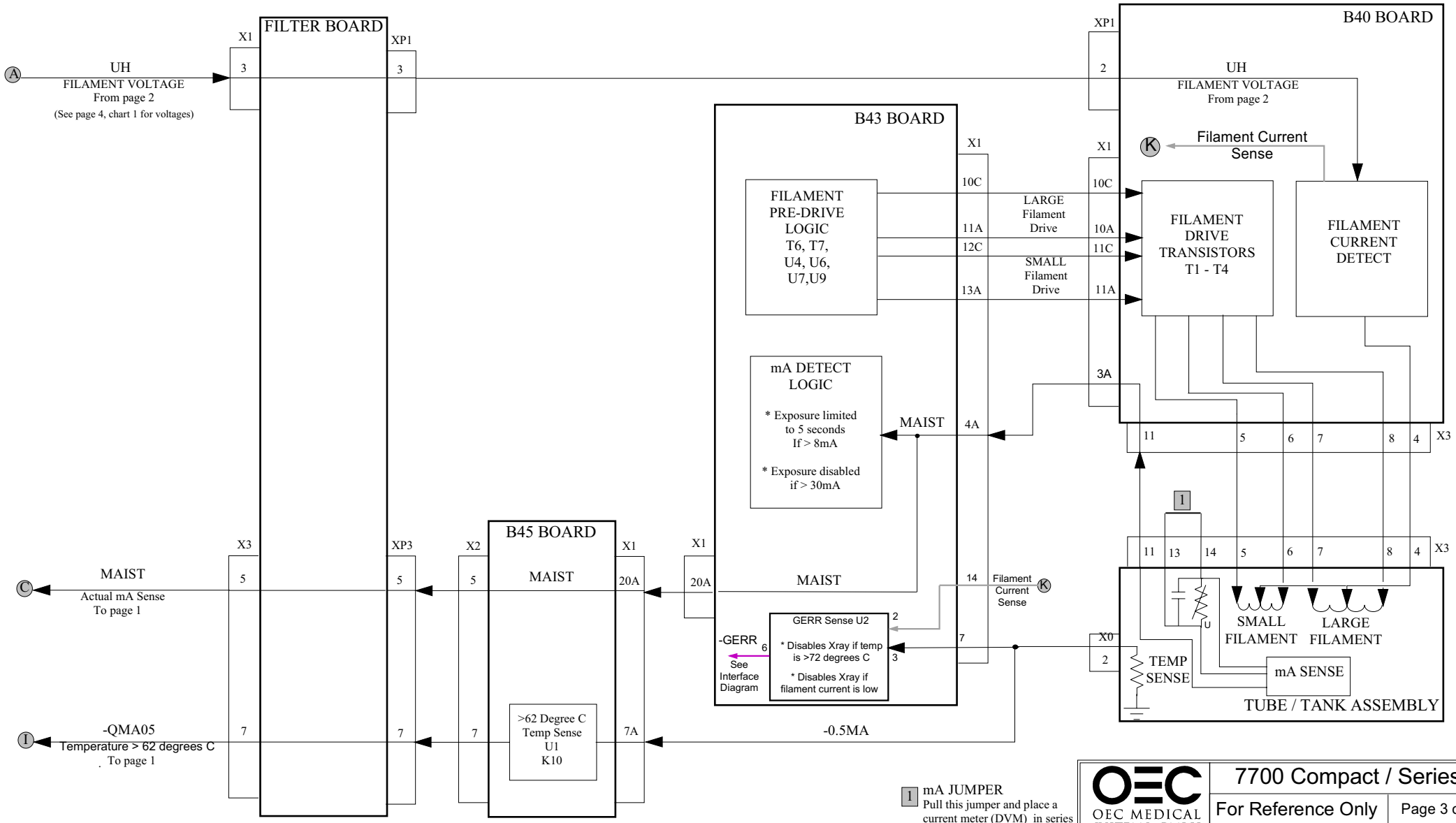
mA GENERATION & REGULATION

B143 FILAMENT CONTROL



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mA GENERATION & REGULATION MONO BLOCK GENERATOR		

UH - APROXEMENT FILAMENT VOLTAGE

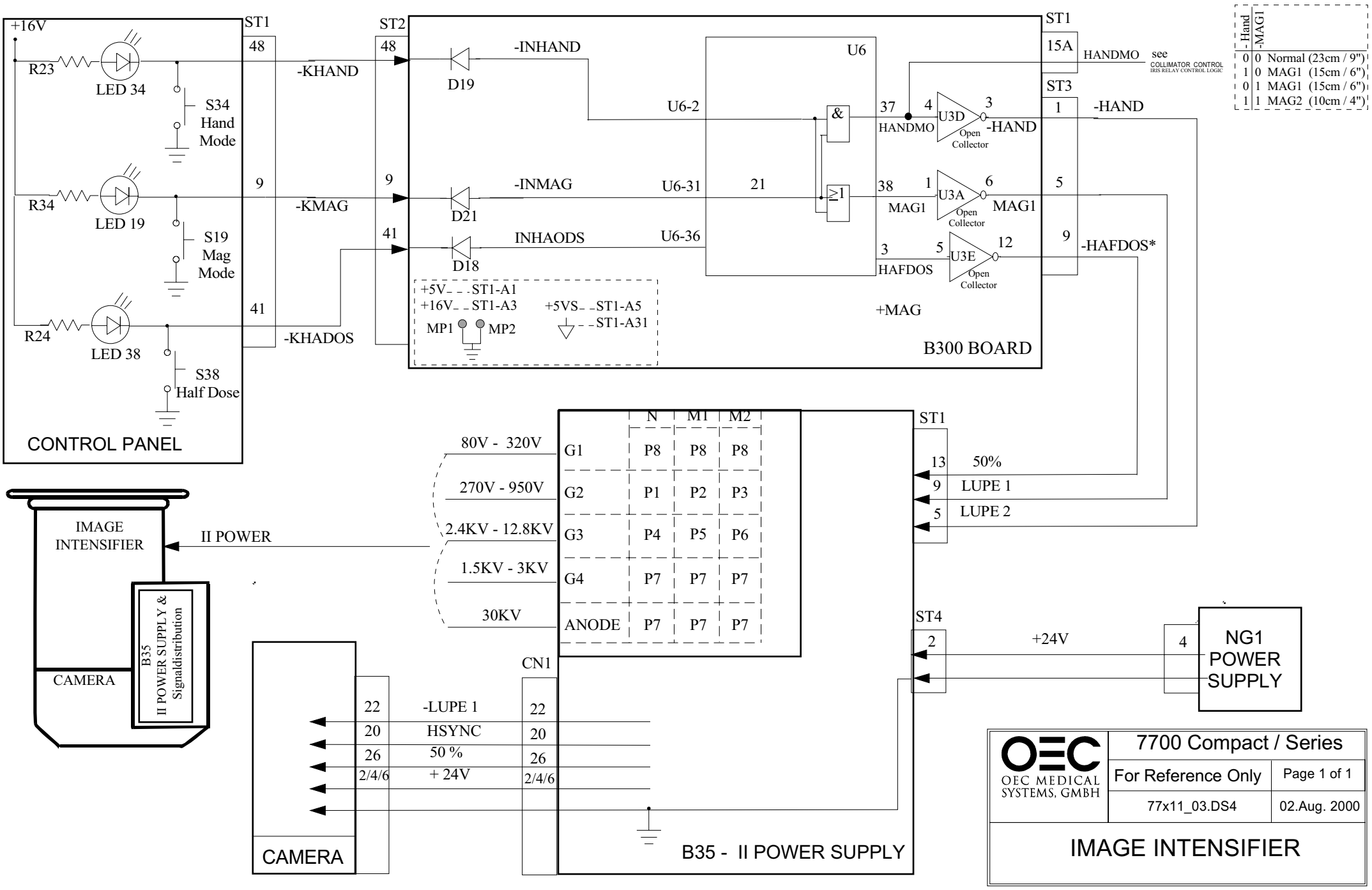
MODE	kV	mA	UH FILAMENT VOLTAGE ** Filter Pcb XP1-3 or B143 Pcb X3-4
Fluoro Standby (Pre-heat)	76		9.8vdc - 10.2vdc
Fluoro Exposure	36	0.2	10.2vdc - 10.6vdc
Fluoro Exposure	110	3.0	11.8v - 12.2vdc
Snapshot	36	8.0	14.0vdc - 15.5vdc
Snapshot	110	8.0	12.5vdc - 13.4vdc
Hip	36	0.2	10.2vdc - 10.6vdc
Hip	110	5.0 - 6.0	11.2vdc - 11.5vdc
Film Mode Prep Press hand switch quickly (less than 1 second).	76		14.9vdc - 15.5 vdc
2 Second Film Exposure	36	20.0	16vdc than dropping to 14.3vdc - 14.8vdc
2 Second Film Exposure	80	20.0	16vdc than dropping to 13.8vdc - 14.3vdc
			** UH Filament Voltage Note ** >21vdc = Xray is disabled (B143 Pcb) Fault Indicator Off 10vdc - 20vdc = good range 6vdc - 9.9vdc = low mA, Fault Indicator Off <5vdc = No mA, Fault Indicator illuminated (See Interface Signals Diagram for Fault Indicator)

Chart 1

B143 Pcb TROUBLESHOOTING CHART
Approximate voltages
Use TP6 as GND

MODE	mA	TP2 MAIST	TP3 Offset	TP4 Filament Regulator Control
76kV Idol Fluoro (No exposure)	0.0	+0.44vdc	0.0vdc	+1.5vdc
36kV Standard Fluoro Exposure	0.2	+0.25vdc	-.103vdc	+0.15
60kV Standard Fluoro Exposure	1.7	-1.1vdc	-.86vdc	+0.94vdc
85kV Standard Fluoro Exposure	3.0	-2.4vdc	-1.5vdc	+1.58vdc

Chart 2


+16V
R23
LED 34
S34
Hand
Mode
R34
LED 19
S19
Mag
Mode
R24
LED 38
S38
Half Dose
CONTROL PANEL
ST1
48
9
41
-KHAND
-KMAG
-KHADOS
ST2
48
9
41
D19
D21
D18
-INHAND
-INMAG
INHAODS
U6-2
U6-31
U6-36
U6
21
&
≥1
+5V ST1-A1
+16V ST1-A3
+5VS ST1-A5
ST1-A31
MP1
MP2
+MAG
B300 BOARD
37
HANDMO
4
U3D
3
Open
Collector
-HAND
38
MAG1
1
U3A
6
MAG1
3
HAFDOS
5
U3E
12
-HAFDOS*
ST1
15A
HANDMO
see
COLLIMATOR CONTROL
IRIS RELAY CONTROL LOGIC
ST3
1
-HAND
5
9
- Hand
-MAG1
0 0 Normal (23cm / 9")
1 0 MAG1 (15cm / 6")
0 1 MAG1 (15cm / 6")
1 1 MAG2 (10cm / 4")
IMAGE
INTENSIFIER
II POWER
CAMERA
B35
II POWER SUPPLY &
Signaldistribution
80V - 320V
270V - 950V
2.4KV - 12.8KV
1.5KV - 3KV
30KV
N
M1
M2
G1
G2
G3
G4
ANODE
P8 P8 P8
P1 P2 P3
P4 P5 P6
P7 P7 P7
P7 P7 P7
ST1
13
50%
9
LUPE 1
5
LUPE 2
ST4
2
+24V
4
NG1
POWER
SUPPLY
CN1
22
20
26
2/4/6
-LUPE 1
HSYNC
50 %
+ 24V
CAMERA
B35 - II POWER SUPPLY
OEC
OEC MEDICAL
SYSTEMS, GMBH
7700 Compact / Series
For Reference Only
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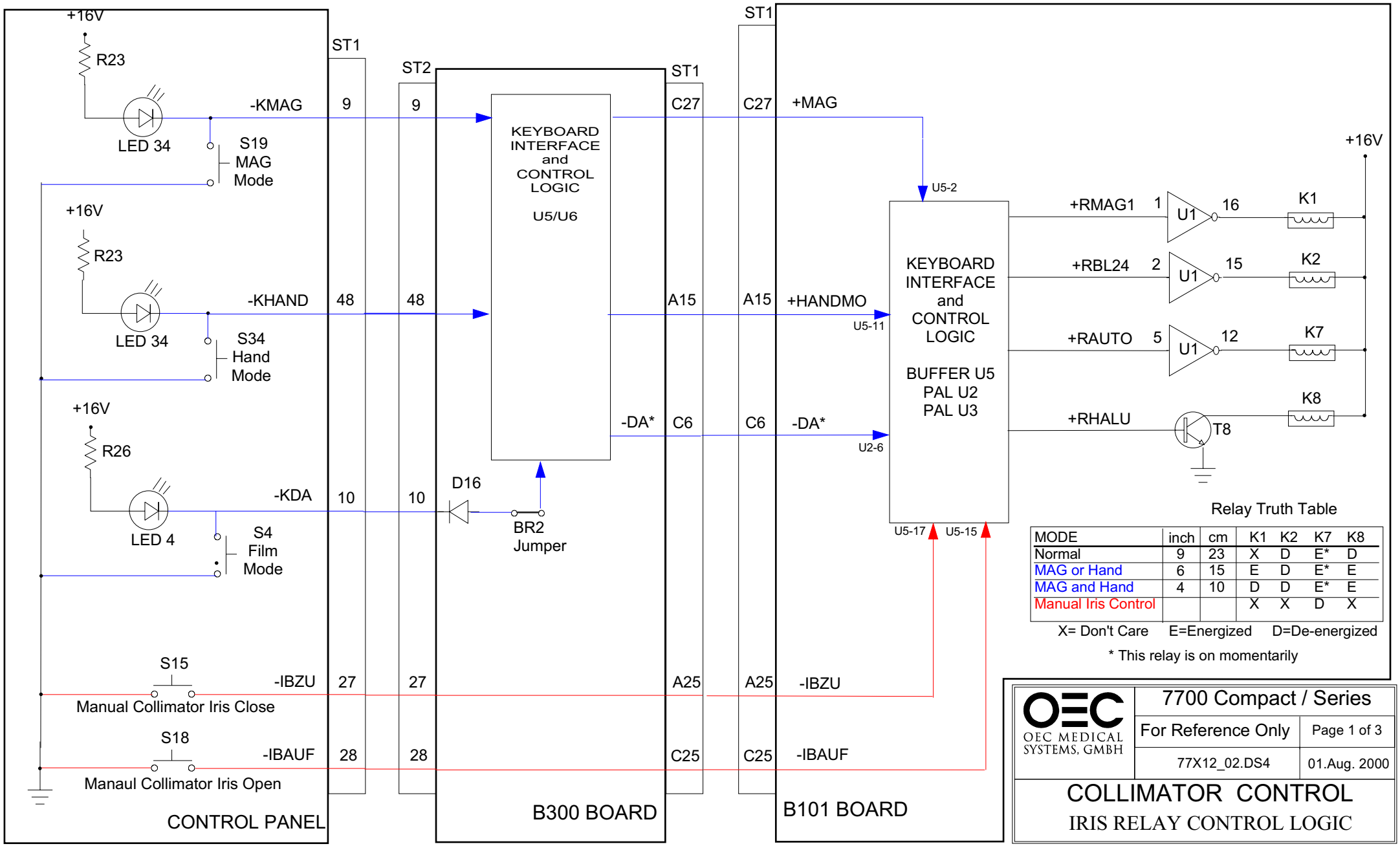
02.Aug. 2000
IMAGE INTENSIFIER



Relay Truth Table

MODE	inch	cm	K1	K2	K7	K8
Normal	9	23	X	D	E*	D
MAG or Hand	6	15	E	D	E*	E
MAG and Hand	4	10	D	D	E*	E
Manual Iris Control			X	X	D	X

X= Don't Care E=Energized D=De-energized

* This relay is on momentarily

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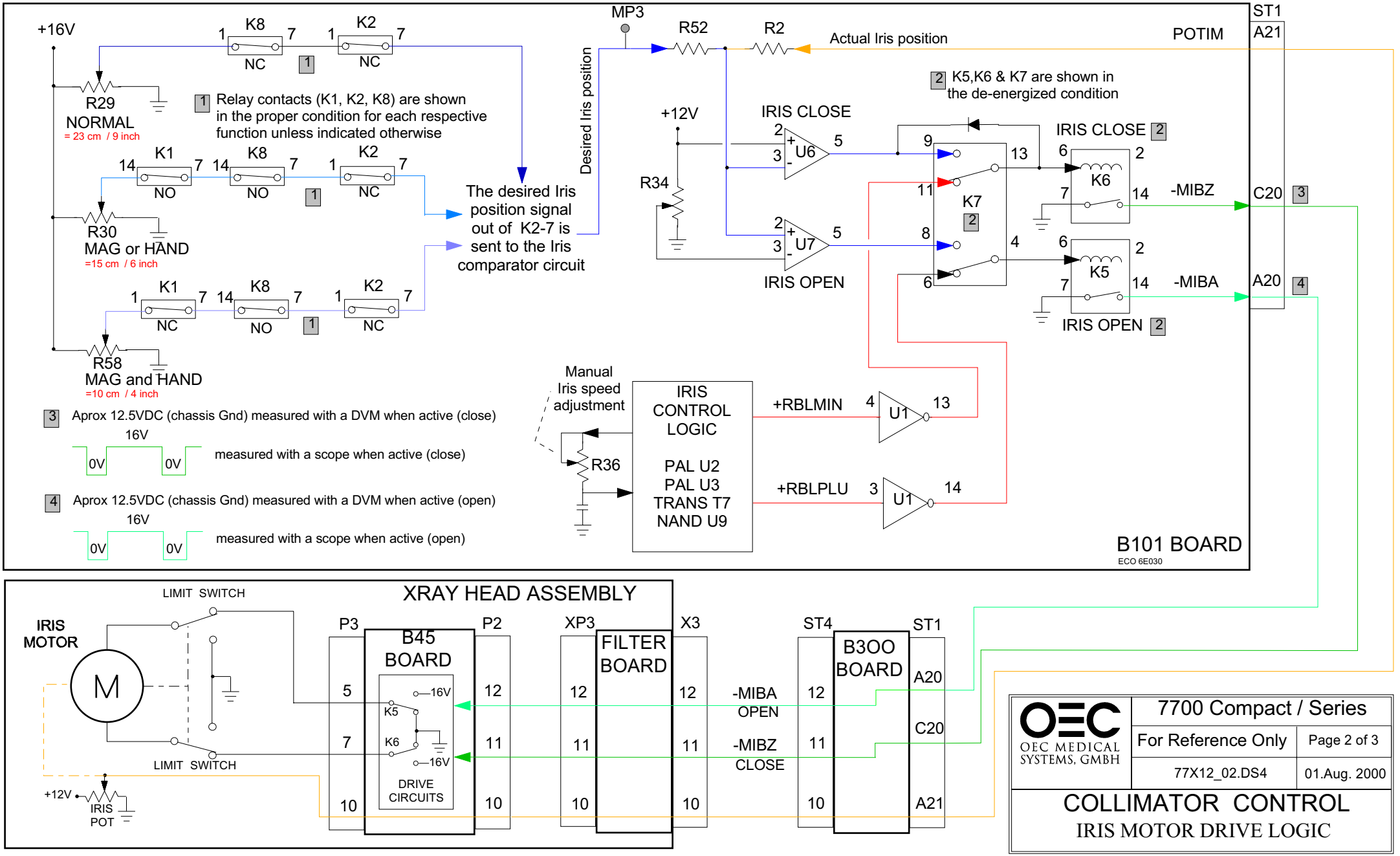
COLLIMATOR CONTROL

IRIS RELAY CONTROL LOGIC


+16V
K8
K2
NC
R29
NORMAL
= 23 cm / 9 inch
1 Relay contacts (K1, K2, K8) are shown in the proper condition for each respective function unless indicated otherwise
K1
NO
R30
MAG or HAND
=15 cm / 6 inch
R58
MAG and HAND
=10 cm / 4 inch
The desired Iris position signal out of K2-7 is sent to the Iris comparator circuit
MP3
R52
R2
Actual Iris position
POTIM
ST1
A21
Desired Iris position
2 K5,K6 & K7 are shown in the de-energized condition
+12V
IRIS CLOSE
U6
R34
U7
IRIS OPEN
K7
K6
K5
-MIBZ
-MIBA
C20
A20
3 Aprox 12.5VDC (chassis Gnd) measured with a DVM when active (close)
16V
0V
measured with a scope when active (close)
4 Aprox 12.5VDC (chassis Gnd) measured with a DVM when active (open)
measured with a scope when active (open)
Manual Iris speed adjustment
R36
IRIS CONTROL LOGIC
PAL U2
PAL U3
TRANS T7
NAND U9
+RBLMIN
+RBLPLU
U1
B101 BOARD
ECO 6E030
XRAY HEAD ASSEMBLY
LIMIT SWITCH
IRIS MOTOR
M
+12V
IRIS POT
P3
B45 BOARD
P2
DRIVE CIRCUITS
XP3
FILTER BOARD
X3
ST4
B3OO BOARD
-MIBA OPEN
-MIBZ CLOSE
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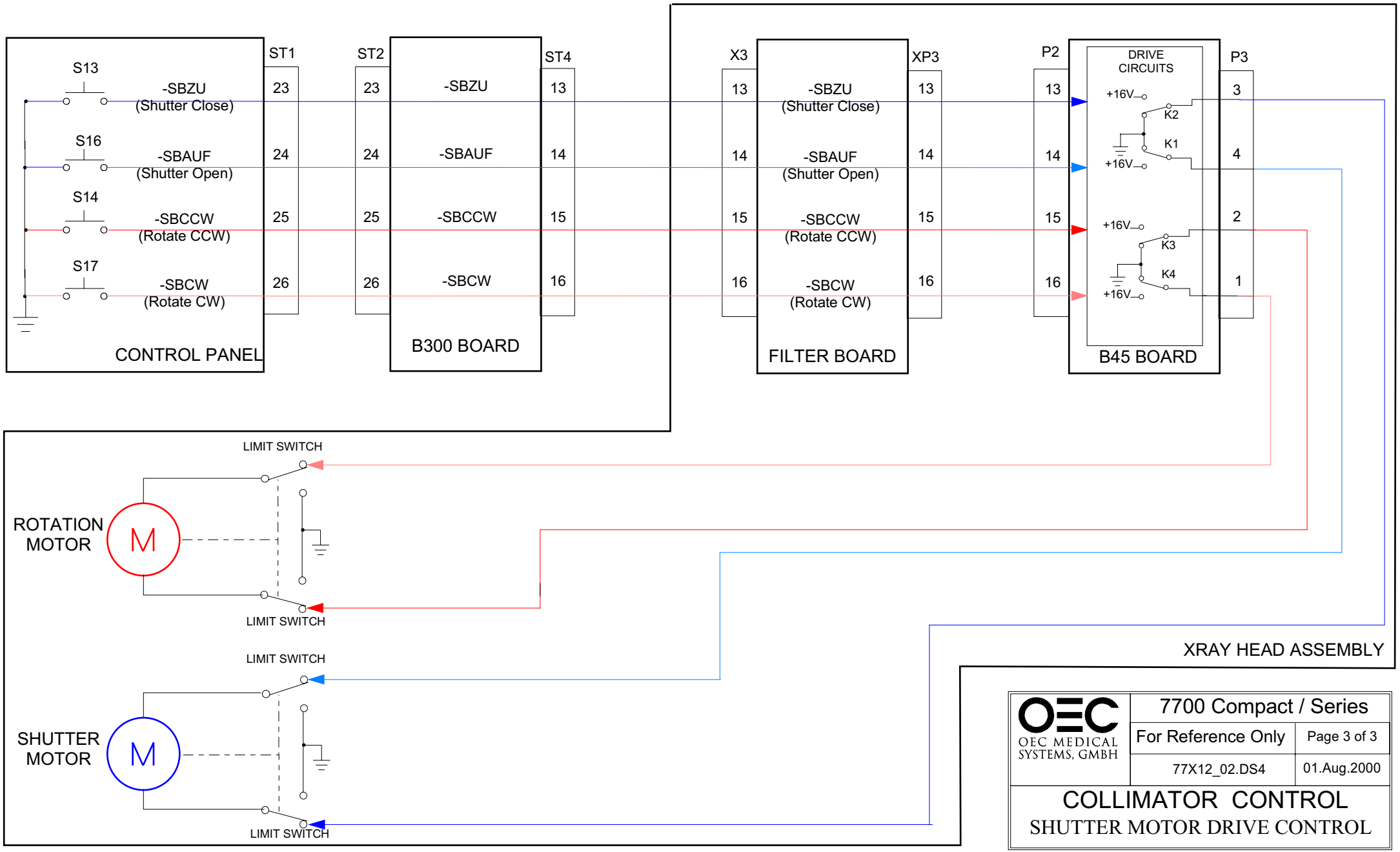
COLLIMATOR CONTROL
IRIS MOTOR DRIVE LOGIC



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COLLIMATOR CONTROL

SHUTTER MOTOR DRIVE CONTROL

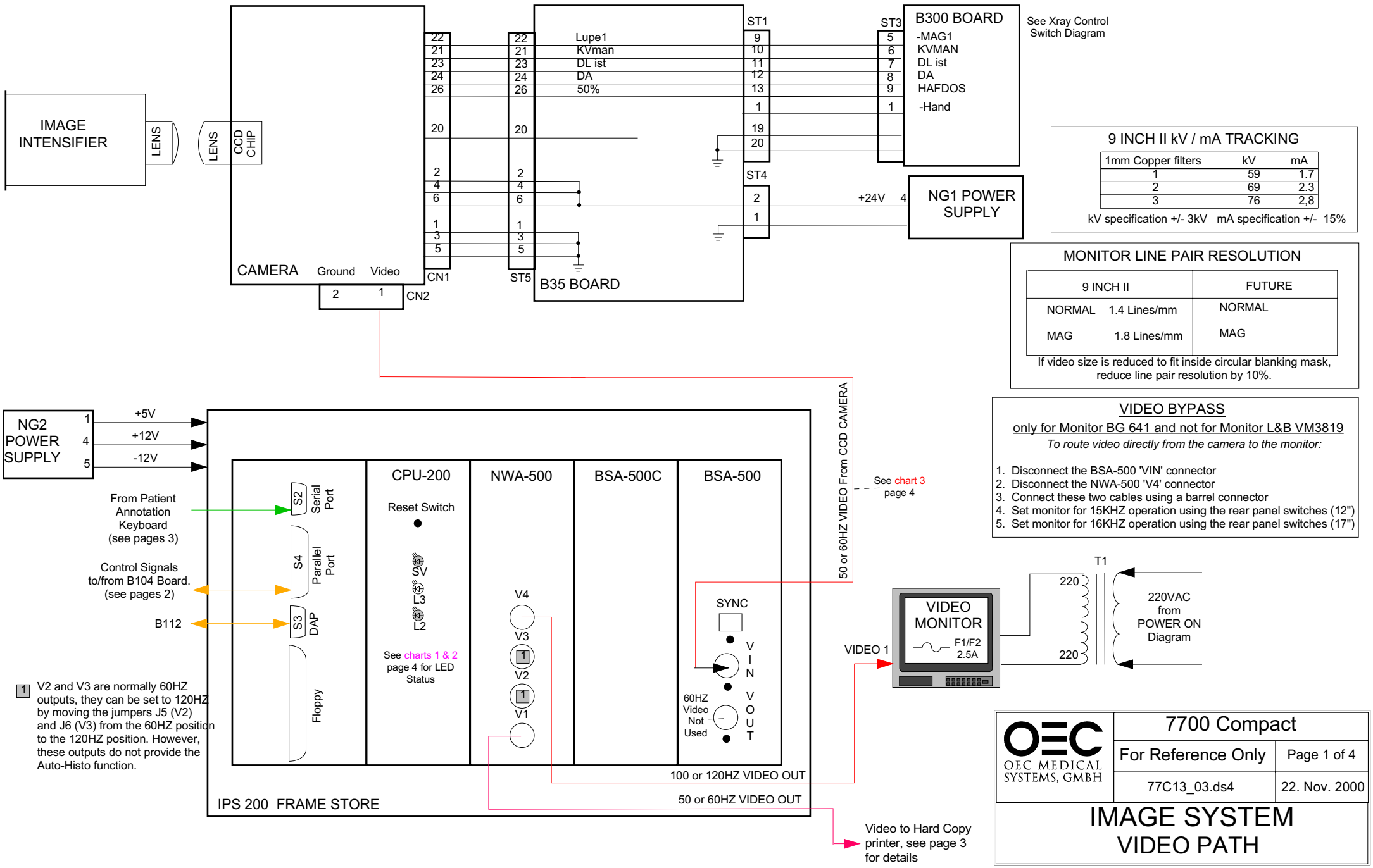
IMAGE INTENSIFIER
LENS
LENS
CCD CHIP
CAMERA
Ground
Video
2
1
CN2
22
21
23
24
26
20
2
4
6
1
3
5
CN1
ST5
B35 BOARD
Lupe1
KVman
DL ist
DA
50%
ST1
9
10
11
12
13
1
19
20
ST3
B300 BOARD
-MAG1
KVMAN
DL ist
DA
HAFDOS
-Hand
See Xray Control Switch Diagram
ST4
2
1
+24V
4
NG1 POWER SUPPLY
9 INCH II kV / mA TRACKING
1mm Copper filters kV mA
1 59 1.7
2 69 2.3
3 76 2,8
kV specification +/- 3kV mA specification +/- 15%
MONITOR LINE PAIR RESOLUTION
9 INCH II
NORMAL 1.4 Lines/mm
MAG 1.8 Lines/mm
FUTURE
NORMAL
MAG
If video size is reduced to fit inside circular blanking mask, reduce line pair resolution by 10%.
NG2 POWER SUPPLY
1
4
5
+5V
+12V
-12V
From Patient Annotation Keyboard (see pages 3)
Control Signals to/from B104 Board. (see pages 2)
B112
S2
Serial Port
S4
Parallel Port
S3
DAP
Floppy
CPU-200
Reset Switch
SV
L3
L2
See charts 1 & 2 page 4 for LED Status
NWA-500
V4
V3
V2
V1
BSA-500C
BSA-500
SYNC
VIN
VOUT
60HZ Video Not Used
IPS 200 FRAME STORE
50 or 60HZ VIDEO From CCD CAMERA
See chart 3 page 4
100 or 120HZ VIDEO OUT
50 or 60HZ VIDEO OUT
VIDEO 1
VIDEO MONITOR
F1/F2 2.5A
T1
220
220
220VAC from POWER ON Diagram
Video to Hard Copy printer, see page 3 for details
1 V2 and V3 are normally 60HZ outputs, they can be set to 120HZ by moving the jumpers J5 (V2) and J6 (V3) from the 60HZ position to the 120HZ position. However, these outputs do not provide the Auto-Histo function.
VIDEO BYPASS
only for Monitor BG 641 and not for Monitor L&B VM3819
To route video directly from the camera to the monitor:
1. Disconnect the BSA-500 'VIN' connector
2. Disconnect the NWA-500 'V4' connector
3. Connect these two cables using a barrel connector
4. Set monitor for 15KHZ operation using the rear panel switches (12")
5. Set monitor for 16KHZ operation using the rear panel switches (17")
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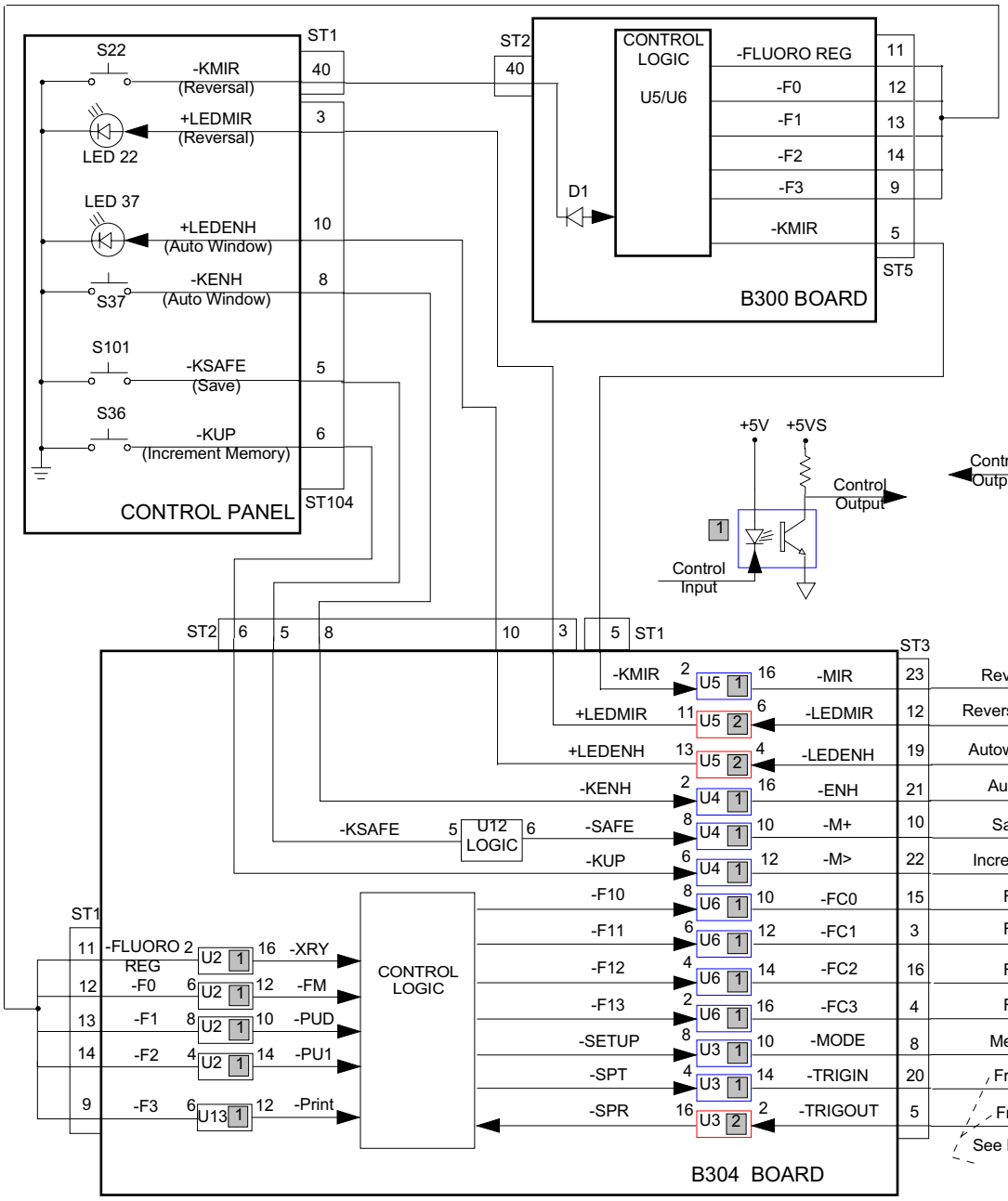
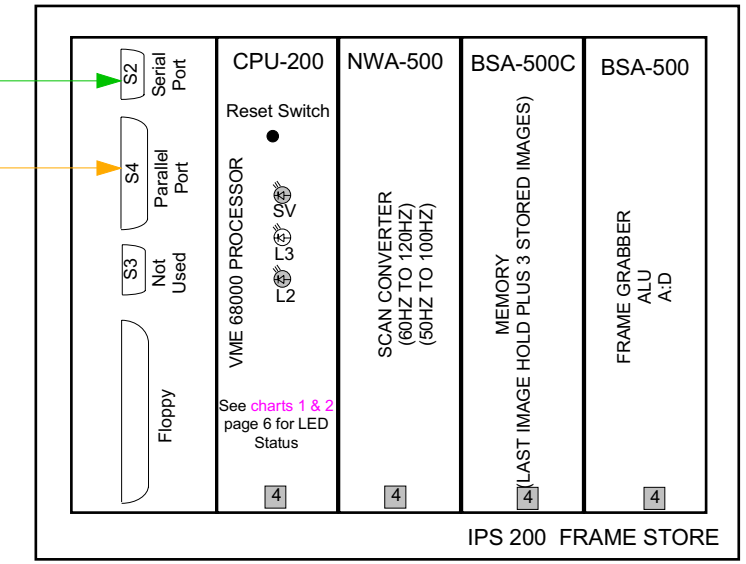
IMAGE SYSTEM
VIDEO PATH





7 TRIGIN = enables the image processor.

8 TRIGOUT = from the image processor stays active, enabling exposure, for 640 msec after the xray switch is released. This ensures sufficient time to for last image hold.

4 See the theory section of the service manual for jumper configurations

ACCESS FRAME STORE SETUP

1. - Press the 'ON' and 'SAVE' switches simultaneously
   - Cycle through menu using the 'M>' switch
   - Toggle selections using the 'SAVE' switch

Note: If there are more then two selections available the message 'NEW VALUE' will be displayed. You can then use the 'M>' switch to change the value.

2. or use Annotation Keyboard for Setup press Shift and Home

5 The filter code bits control the amount of averaging used. Averaging varies depending on the operating mode. See chart 4, page 6

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IMAGE SYSTEM
FRAME STORE CONTROL

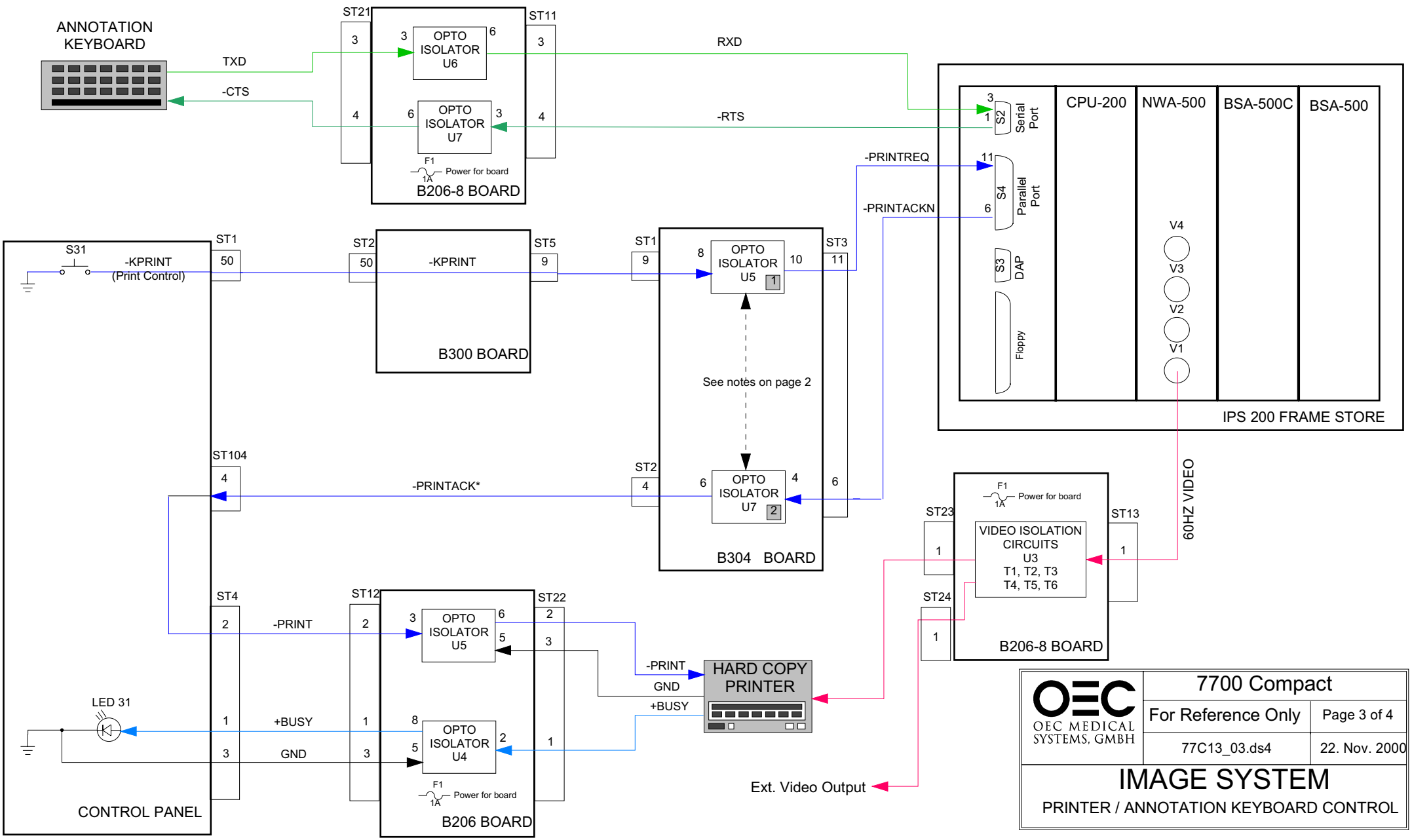

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IMAGE SYSTEM

PRINTER / ANNOTATION KEYBOARD CONTROL

LED STATUS

CONDITION	LED SV	LED L3	LED L2
Standby	ON	OFF	ON
Fluoro exposure	ON	OFF	ON
Loss of Camera Sync during Fluoro Exposure	ON	OFF	ON
No Camera Sync during Boot-Up	ON	OFF	OFF

Chart 1

LED ERROR INDICATIONS DURING BOOT-UP

BMS 500 Frame Store Board Failures

ERROR CONDITIONS	LED SV	LED 3	LED 2
CPU 100 Failure	OFF		
CPU 100 EPROM/PROM Failure		1 Blink	
CPU 100 RAM Failure		2 Blinks	
CPU 100 Clock Failure		3 Blinks	
BSA 500 Failure			1 Blink
BSA 500C Failure			2 Blinks
BSA 500 RAM Failure			3 Blinks
BSA 500C RAM Failure			4 Blinks
BSA 500 IC Failure			5 Blinks
BSA 500 Controller Failure			6 Blinks
BSA 500 Failure			7 Blinks

Chart 2

VIDEO & VIDEO LEVEL

Approximate Voltages

(The Xray Head cover should be on for these measurements)

TEST PHANTOM	VIDEO SIGNAL out of camera head 9 pin connector pin 5	VIDEO SIGNAL out of VD01 Pcb pin 17 - white wire	DLIST SIGNAL out of AU01 Pcb TP1	kV
No object in the beam	1.6V - 1.8 V Peak/Peak	0.8V - 1.0 V Peak/Peak	6.0Vdc	39 - 45
Three 1mm copper filters	1.6V - 1.8 V Peak/Peak	0.8V - 1.0 V Peak/Peak	6.0Vdc	79 - 85

Chart 3

IMAGE PROCESSOR FILTER CONTROL CODES

MODE	FILTER CONTROL CODE FC3	FC2	FC1	FC0		CONTROL LINES FM	PUD	PU1
Standard Fluoro	0	H	H	0		H	H	H
Pulse	0	H	H	0		H	0	H
Snapshot	H	0	H	H		H	H	0
Hip	0	0	H	H		0	H	H
Hand	0	H	H	0		0	H	0
Thorax	0	H	H	0		H	0	0
Low Dose	0	H	0	H		0	0	0

Chart 4

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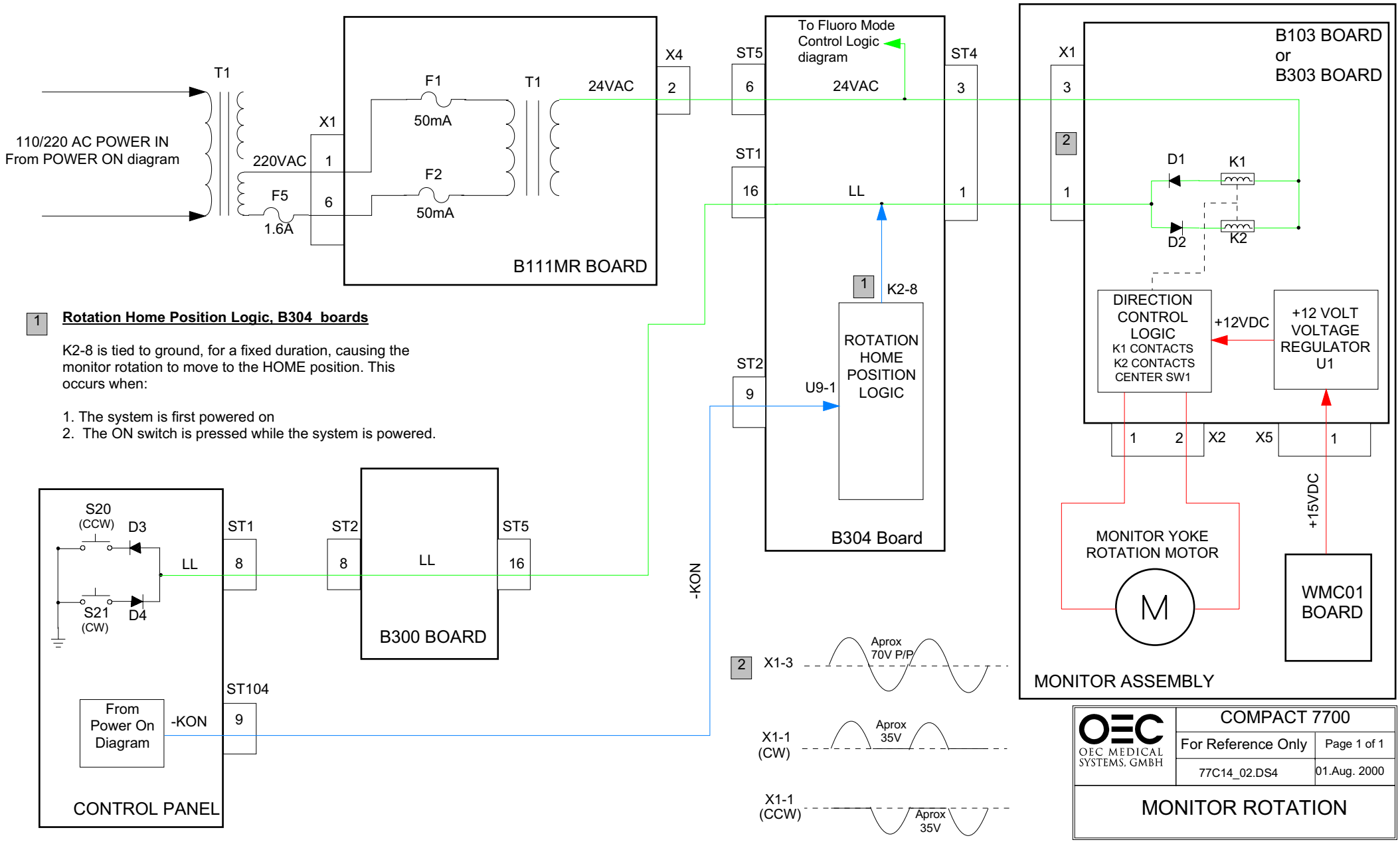
IMAGE SYSTEM

TROUBLESHOOTING CHARTS



1 **Rotation Home Position Logic, B304 boards**

K2-8 is tied to ground, for a fixed duration, causing the monitor rotation to move to the HOME position. This occurs when:

1. The system is first powered on
2. The ON switch is pressed while the system is powered.

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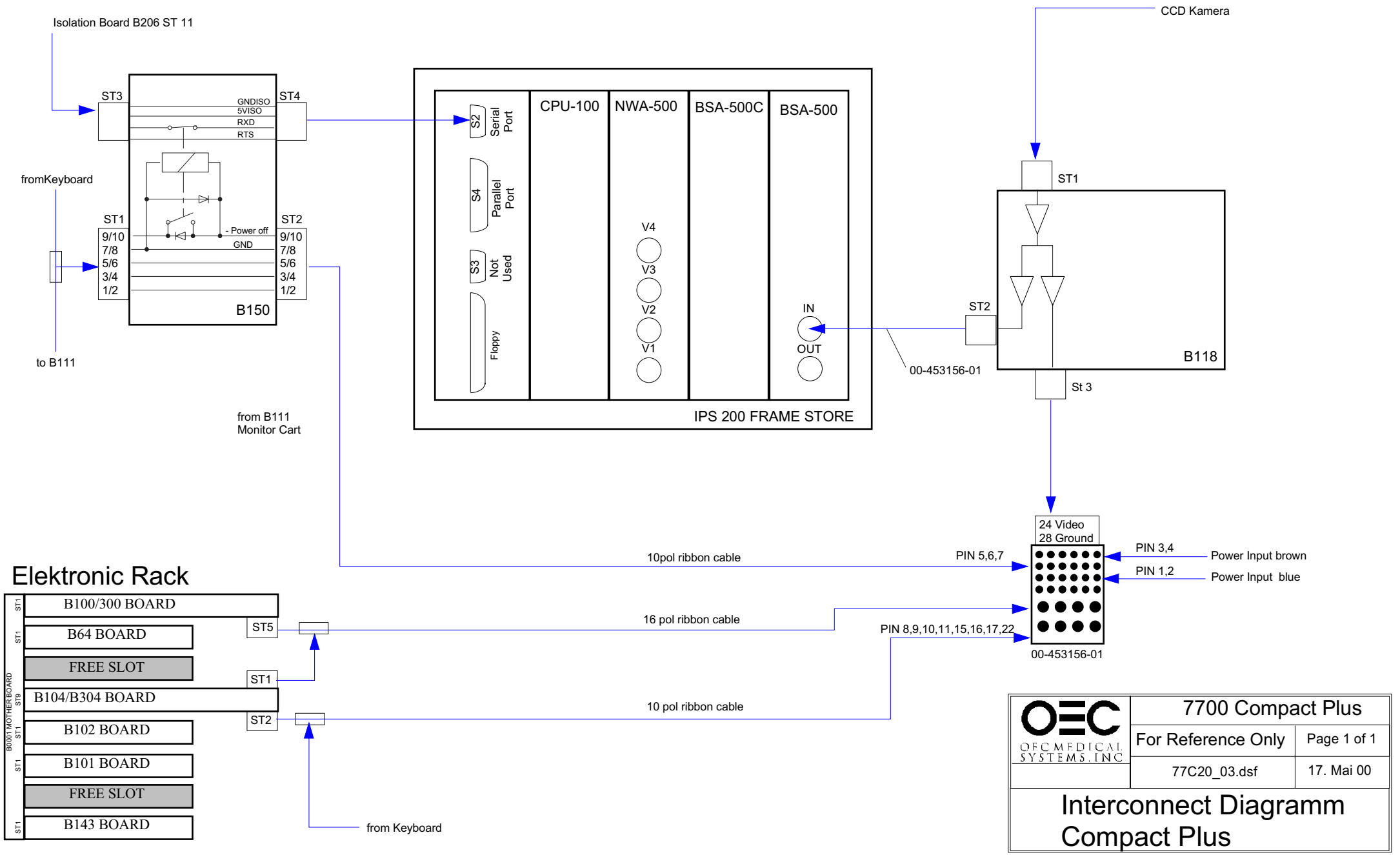
MONITOR ROTATION		


Isolation Board B206 ST 11
ST3
ST4
GNDISO
5VISO
RXD
RTS
fromKeyboard
ST1
ST2
9/10
7/8
5/6
3/4
1/2
- Power off
GND
B150
to B111
from B111
Monitor Cart
S2
Serial Port
S4
Parallel Port
S3
Not Used
Floppy
CPU-100
NWA-500
BSA-500C
BSA-500
V4
V3
V2
V1
IN
OUT
IPS 200 FRAME STORE
CCD Kamera
ST1
ST2
B118
St 3
00-453156-01
24 Video
28 Ground
PIN 5,6,7
PIN 3,4
Power Input brown
PIN 1,2
Power Input blue
10pol ribbon cable
16 pol ribbon cable
PIN 8,9,10,11,15,16,17,22
10 pol ribbon cable
00-453156-01
Elektronic Rack
B0.001 MOTHER BOARD
B100/300 BOARD
B64 BOARD
FREE SLOT
B104/B304 BOARD
B102 BOARD
B101 BOARD
FREE SLOT
B143 BOARD
ST5
ST1
ST2
from Keyboard
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17. Mai 00
Interconnect Diagramm
Compact Plus